2 Pregnancy and postnatal care

About your pregnancy

Congratulations on becoming an expectant parent—this is a very exciting time in your life, even though you may be inclined to feel flat and sick at first. Your baby is very special and deserves every opportunity to get a flying start in life by growing healthily in your womb. Pregnancy is a very normal event in the life cycle and usually goes very smoothly, especially if you have regular medical care.

Why have regular checks?

Antenatal care is considered to be the best opportunity in life for preventive medicine. It is important to check the many things that can cause problems—these are uncommon, but preventable. A special possible problem is *pregnancy-induced hypertension*, a condition of weight gain, high blood pressure and kidney stress, which shows up as protein in the urine.

Areas that need to be checked include:

- blood count
- blood grouping and Rhesus antibodies (Rh factor)
- immunity against infections that may affect the baby (e.g. rubella, hepatitis B and C, HIV)
- number of babies (one or more)
- size and state of your pelvis
- blood pressure
- urine (for evidence of diabetes or pre-eclampsia)
- cervix (smear test)
- progress of the baby (e.g. size of uterus, heartbeat)
- mother's progress, including emotional state
- blood sugar (for possible diabetes)

When should you be checked?

The recommended routine is as early as possible and then every 4 to 6 weeks until 28 weeks of gestation, then every 2 weeks until 36 weeks, and then weekly until the baby arrives (usually 40 weeks). An ultrasound is usually performed at about 18 weeks.

What common things can cause problems in the baby?

- infections such as rubella
- diabetes (can develop in pregnancy)
- high blood pressure
- smoking—retards growth and should be stopped (if impossible, limit to 3–6 smokes per day)
- alcohol—causes abnormalities, including mental retardation, and should not be taken (if you must, drink 1–2 glasses of beer per day maximum)
- other social drugs
- aspirin and various other drugs (check with your doctor)

What is usually prescribed?

Folic acid is now recommended for 4 weeks and preferably 12 weeks before getting pregnant, then for the first 3 months.

No iron tablets are needed if you have a healthy diet and do not have severe morning sickness.

What important areas should you attend to?

Nutrition

A healthy diet is very important and should contain at least the following *daily* allowances:

1. Eat most:
   - fruit and vegetables (at least 4 serves)
   - cereals and bread (4–6 serves)
2. Eat moderately:
   - dairy products—3 cups (600mL) of milk or equivalent in yoghurt or cheese
   - lean meat, poultry or fish—1 or 2 serves (at least 2 serves of red meat per week)
3. Eat least:
   - sugar and refined carbohydrates (e.g. sweets, cakes, biscuits, soft drinks)
   - polyunsaturated margarine, butter, oil and cream

Bran with cereal helps prevent constipation of pregnancy.

Talk to your doctor about Listeria infection, which is contracted from fresh and unprocessed foods such as soft cheeses, pate and unpasteurised milk.

Antenatal classes

Trained therapists will advise on antenatal exercises, back care, postural advice, relaxation skills, pain relief in labour, general exercises and beneficial activities such as swimming.

Breastfeeding and nursing mothers

Breastfeeding is highly recommended. Contact a local nursing mothers' group for support and guidance if you need help.

Employment and travel

Check with your doctor. Avoid standing in trains. Avoid international air travel after 28 weeks.

Normal activities

You should continue your normal activities. Housework and other activities should be performed to just short of feeling tired. However, get sufficient rest and sleep.

When should you contact your doctor or the hospital?

Contact your doctor or seek medical help:

- if contractions, unusual pain or bleeding occur before the baby is due
- if the baby is less active than usual
- if membranes rupture and a large amount of fluid comes out
- when you are getting regular contractions 5–10 minutes apart

Help is only a telephone call away.

Allergy in your baby

What is allergy?

Allergies are sensitive reactions that occur when the body's immune system reacts in any unusual way to foods, airborne dust, animal hair and pollens. This results in conditions such as hay fever, eczema, hives and bowel problems. The condition is also called *atopy*.

Allergies are common in babies and children. They usually disappear as the child grows older, but sometimes can continue into adult life.

Unlike most of the common illnesses (such as measles and chickenpox) an allergy can have many symptoms, and these vary widely from child to child. Allergies are not infectious.

How to tell if a baby has an allergy

An allergic reaction might take hours or even days to develop and can affect almost any part of the body. Symptoms may be any of the following:

1. *Digestive system (includes stomach and intestines)*: nausea, vomiting and spitting up of food, colicky behaviour in the young baby (including pulling away from the breast), stomach pain, diarrhoea, poor appetite, slow weight gain.
2. *Respiratory system (includes nose, throat and lungs)*: runny nose, sneezing, wheezing, asthma, recurring attacks of bronchitis or croup, persistent cough.
3. *Skin*: eczema, hives, other rashes.

What are the causes?

Common causes of allergic reaction are foods and airborne irritants. Soaps and detergents might aggravate some skin conditions.

- Foods that commonly cause allergic reactions include milk and other dairy products, eggs, peanut butter; sometimes oranges, soya beans, chocolate, tomatoes, fish and wheat.
- Airborne particles linked with allergic reactions include dust mites, pollens, animal hair and moulds.

Some reactions are caused by food additives such as colourings, flavourings and preservatives. Additives are found in many prepared foods (e.g. lollies, sauces, ice-cream, cordial, soft drinks, biscuits, savoury snacks and processed meats).

The allergic reaction to dairy products has almost the same symptoms (stomach pain and diarrhoea) as those that occur when a baby has *lactose intolerance*, which is when he or she cannot digest the sugar (lactose) in dairy products. The correct diagnosis is a matter for your doctor.

Is allergy inherited?

Allergy cannot be passed from generation to generation, but children from families that have a tendency to allergy have a greater chance of becoming allergic. However, anyone can become allergic.

What is the management?

Feeding

Breastfeeding of allergy-prone babies for the first 6 months might diminish eczema and other allergic disorders during infancy.

If breastfeeding is not possible, choose a breast milk substitute (formula) carefully. Get advice from your doctor or infant welfare nurse.

What happens when solids are introduced?

If possible, do not start solids until the baby is 5 or 6 months old. Start one food at a time, in small amounts. The quantity can be increased the next day if no reaction occurs.

New foods should be introduced at least several days apart. Particular care should be taken when starting foods that most commonly cause allergic reactions (dairy products, eggs, citrus fruits and peanut butter). They should be avoided during the first 6–9 months.

Be alert!

If possible, prepare the baby's food using fresh ingredients. For example, a child with cow's milk allergy should avoid cow's milk in any form. Read labels carefully to check ingredients in products.

Other allergies

Many babies and children develop allergies to house dust and animal hair. Vacuuming regularly and keeping pets outside will reduce the problem.

Bedding should be aired regularly. Damp and poorly ventilated homes are subject to mould, which can cause allergy. Both the mould and its cause should be eliminated.

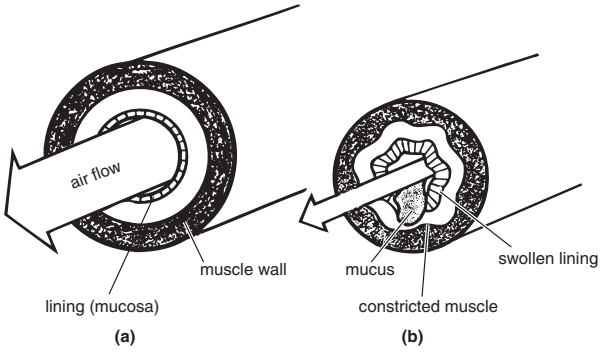
Other things that can be done

- Cotton clothing is best for babies and children with skin problems.
- Avoid strong soaps, detergents and nappy wash solutions.
- Boil the baby's bottles rather than use chemical solutions.
- Use household chemicals such as strong fly sprays, perfumes and disinfectants sparingly, and air the house thoroughly afterwards.
- Do not smoke or allow others to smoke when your baby is in the room.

Asthma in children

What is asthma?

Asthma is a common chest condition that affects the small air passages (*bronchi*) of the lungs, which are very sensitive. During an asthma attack these breathing tubes become narrow from spasm of the muscles in the wall and the secreting of mucus. This makes it harder for the air to flow in and out of the lungs.



(a) Normal airway; (b) airway in asthma

How common is asthma?

About 1 child in 4 or 5 may wheeze and at least half of these have only mild asthma. It is more common between the ages of 2 and 8 years. Many children appear to 'grow out of it' by puberty, but a small number have it again as adults.

What causes asthma?

Asthma is brought on in different ways for each child, and the time of an attack is often unpredictable. Trigger factors include a cold, a sudden change in weather or temperature, dust, allergies, cigarette smoke, pollens, some animals, certain foods (e.g. peanuts) and certain drugs (e.g. aspirin). Often it is difficult to know what has caused an attack.

How long does an attack last?

It may last from a few hours to a few days. Most children are normal between attacks, although there may be a mild amount of wheezing heard with the stethoscope.

How do I know if my child has asthma?

The main symptoms are a cough and wheeze. A persistent cough may be a symptom of asthma. The cough is most likely to occur during the night usually in the early hours of the morning, with cool weather and with exercise. These symptoms should be checked out by your doctor.

What is the medicine for asthma?

There are medicines that really help children with asthma. Three types of medications used in children are:

- *relievers* (such as Bricanyl, Ventolin and Atrovent) that treat the spasm during an attack and are quick-acting—they are called *bronchodilators*
- *preventers* (such as Pulmicort, Flixotide, Tilade and Intal) that help prevent attacks by treating the inflammation in the airways
- *new anti-inflammatory agents* (such as Accolate and Singulair) that can be added to the preventers for children with frequent asthma

If your child is having asthma attacks more than once a month, or needing lots of relievers, talk to your doctor about preventive treatment.

Methods of delivery of medicine

The most effective delivery is by inhalation into the lungs. This can be done using:

- a puffer with a spacer device
- a dry powder inhaler
- a nebuliser

It is usual to use spacer devices, which are very effective. They are plastic chambers which make delivery easier to manage and allow the medication to get well into the lungs. In infants and toddlers a face mask attached to the spacer is used to help deliver the aerosol to the lungs.

The Asthma Action Plan

Ask your doctor or asthma nurse educator to provide you with an Asthma Action Plan for an acute attack or for an emergency situation.

A guide to what to do is as follows:

In an acute attack

- For coughing and wheezing give reliever medication 4 times over 4 minutes and then repeat as needed.
- If this fails to control the symptoms, contact your doctor or go to a hospital emergency department.

In an emergency

Call an ambulance if your child is:

- finding it difficult to breathe
- unable to talk
- turning blue
- getting worse quickly
- drawing in the chest wall

While waiting for the ambulance, give your child 4 puffs of reliever medication (such as Ventolin) every 4 minutes by a spacer device.

Attention deficit hyperactivity disorder

What is attention deficit hyperactivity disorder (ADHD)?

ADHD is a behaviour disorder of children with the key features of problematic behaviour and difficulty with learning. It affects about 1 in 20–30 children and is far more common in boys, being about 6 times more prevalent compared with girls.

It is usually present from early childhood, even in infancy, and has an onset no later than 7 years of age.

What is the cause of ADHD?

The cause is not clearly known but many experts believe that it has a hereditary basis. Having ADHD does not imply that the child has an illness or is not intelligent.

What are the main diagnostic features of ADHD?

The 3 characteristic features are:

- *inattention*—has difficulty concentrating, following directions and forgets instructions
- *overactivity*—the hyperactive child cannot seem to stay still, and is fidgety and restless
- *impulsiveness*—a tendency to 'shoot from the hip' and do 'stupid things' without thinking or taking steps to correct this problem; a tendency to talk over the top of others and to be accident-prone

The symptoms must be present in at least two situations, for example, at both home and school.

Note: Not all children with ADHD are overactive and not all children who are inattentive, overactive and impulsive have ADHD.

It is very important to accurately diagnose ADHD before putting such a label on the child—there are no foolproof diagnostic tests, including blood tests, to make the diagnosis. There has to be a consistent pattern to the behaviour and not occasional breakdown in attention span or impulsive acts which can happen to any normal child. Your doctor can make an assessment of the child and arrange a referral.

What are other features?

Day-to-day problems can include some or all of the following:

- irritability, including a 'short fuse'
- moodiness
- poor co-ordination
- disorganisation
- inflexibility
- clumsiness
- poor school performance with learning disability in at least 25% of children with ADHD
- difficulty mixing with other children
- lack of a consistent work or study pattern
- causes a lot of distress in the home
- poor short-term memory

Symptoms range from mild to severe.

How does the child with ADHD affect the family?

Parents usually come in looking exhausted and frustrated with the comment, 'I didn't realise raising children was this hard'. The patience of all members of the family can be stretched to breaking point.

What can be done?

The child should be assessed by an expert in the area. There are many things that can be done to help children and their families, including medication, teacher/school support and parent support groups.

Help for the child

- Protect their self-esteem.
- Praise any positive behaviour.
- Be consistent in your approach and with routines.
- Don't make a thing out of minor behavioural issues.
- Have appropriate 'punishments' for major misbehaviours (time-out is suitable for those 2–10 years of age).
- Old-fashioned 'toe in the backside' and 'clip over the ears' methods do not work.
- Have clear and simple rules to follow.
- Be close to them and insist on having their full attention when giving instructions.
- Watch out for risk-taking behaviours and be protective.
- Establish clear-cut routines, rules and consequences.

The children need much understanding and support from the family, teachers and therapists as their difficult behaviour is not intentional.

Help for the family

- Work as a team within the family.
- Work as a team with teachers and community contacts.
- Try to join a support group.
- Get frequent breaks from the child.

Medication

The use of medicines for ADHD is controversial but there are very effective medications available. Your doctor will be able to advise on the best option. If the prescribed drug proves helpful, it may be necessary to use it for years.

Is a special diet recommended?

It is always valuable to encourage a good balanced diet and a dietician can help. However, the old method of treating ADHD with a special exclusion diet such as avoiding junk foods, colouring and preservatives has not been shown generally to be of significant benefit.

What is the outlook?

As a rule children do not grow out of ADHD. Although many symptoms can improve with time, more than one-half of children will carry some degree of the disorder into adult life.

4 Adolescent health

Acne

What is acne?

Acne is inflammation of the *sebaceous* (oil) glands of the skin. At first these glands become blocked (blackheads and whiteheads) and then inflammation can lead to red bumps (*papules*), yellowheads (*pustules*), and even deep, tender cysts.

Acne is a common disorder of adolescence. It appears usually on the face, but can extend onto the neck, chest and back.

What is the cause?

Acne is related to the increase in the levels of male hormones during puberty in both sexes. Although the increase in hormone levels is normal, some people seem more sensitive to it.

Bacteria on the skin grow in the blocked gland and release fatty acids, which are irritating and set up inflammation.

Who gets it?

Most young men aged 13–18 will get acne. It is worse in males aged 18–19. It is slightly less common in girls; for them it is worse around 14 years and around period time.

When will it settle down?

It usually settles by the age of 20, but may continue longer in severe cases.

Important facts about acne

1. It is not usually affected by diet.
2. It is not caused by oily hair or hair touching the forehead.
3. It is not infectious from one person to another.
4. Ordinary chemicals (including chlorine in swimming pools) do not make it worse.
5. Blackheads are not dirt, and will not dissolve in hot, soapy water.
6. It may flare up with excessive stress.

A word to parents

Your son or daughter hates acne and finds it embarrassing. It is not due to the way the skin is washed or what is eaten—it just happens.

It will not help if you are overanxious and nag your child; give support and encouragement instead, especially in following your doctor's instructions.

Treatment

This varies according to the severity and persistence of the problem and the person's skin type. Severe cases require specialist referral.

Diet

Avoid any foods that seem to aggravate your acne (such as chocolate or milk), but special diets are not advised. However, have a sensible, nutritious diet.

Soap and washing

Special soaps are unhelpful. Use a normal soap and wash gently and often—do not scrub.

Cosmetics

Avoid oily or creamy cosmetics and all moisturisers. Use cosmetics sparingly. Water-based lotion-style cosmetics are preferred.

Hair washing and shampoos

These make no difference.

Blackhead removal

This is not recommended; avoid picking and squeezing.

Exercise

This is not of proven value.

Ultraviolet light

This can be very beneficial (includes sunlight and controlled artificial ultraviolet light). However, avoid extreme exposure to ultraviolet light. (This includes avoiding sunburn.)

Lotions, creams and gels

Many preparations are useful. These include sulphur, salicylic acid, azelaic acid, benzoyl peroxide and retinoic (tretinoin) lotions.

Antibiotics

Those taken by mouth are of proven value, especially long-term tetracyclines. Topical antibiotic preparations are also effective.

The pill

Women who have acne and require oral contraception can benefit from some pill preparations. Ask your doctor.

9 Infections

AIDS and HIV infection

What is AIDS?

Acquired—not inherited
Immune—body's defence system
Deficiency—not working properly
Syndrome—a collection of signs and symptoms

What is the cause of AIDS?

AIDS is caused by a virus called the *human immunodeficiency virus* (HIV). It may start as an acute glandular fever or flu-like illness that soon settles. However, the incubation period seems to vary from 3 months to 20 years (average 10 years), after which about 30% of people infected with HIV will develop full-blown AIDS, 40% may develop milder AIDS-related conditions (ARC) and 30% appear to remain healthy although carrying the virus. These fit people are called *antibody positive*, and although they are healthy they can pass the virus on to others. However, usual non-sexual contact is safe and an HIV positive person is otherwise not a risk to the general population.

How do you catch HIV?

HIV is transmitted in semen, blood and vaginal fluids through:

- unprotected sexual intercourse (anal or vaginal) with an infected person and, rarely, from oral sex
- infected blood entering the body (through blood transfusion or by IV drug users sharing needles/syringes)
- artificial insemination
- infected mothers (to babies during pregnancy, at birth or in breast milk)

It is not 'easy to catch' other than by these means. There is no evidence anywhere that it is spread from public places (e.g. toilets, swimming pools), shaking hands or kissing, sharing eating utensils and so on.

Infection with HIV can occur via the vagina, rectum or open cuts and sores, including any on the lips or in the mouth.

What are the symptoms?

Most patients with HIV infection have no symptoms, but when AIDS develops any one or a combination of the following may be present:

- constant tiredness
- unexplained weight loss
- recurrent fever or night sweats
- decreased appetite
- persistent diarrhoea
- persistent cough
- swollen lumps (glands) in the neck, groin or armpit
- unusual skin lumps or marks
- recurrent thrush in the mouth
- mouth sores

What does 'antibody positive' mean?

It means that people have antibodies to HIV in their bloodstream and have been infected at some stage. It does not mean they have the illness of AIDS, but means that they carry the virus and could pass it on through their blood or by sex. This antibody is detected by a special laboratory test. It may take up to 3 or even 6 months to become positive after contact.

How are HIV positive people monitored?

Immune status is measured through CD_4 cell counts. HIV concentration in the blood is measured through viral load tests. These tests help reassure infected people and allow the doctors to work out when treatment will be necessary.

Can AIDS be cured or treated?

There is no cure at present, but it can be treated. There are several antiviral drugs including *zidovudine* (AZT) that fight HIV and can prolong the lives of people with AIDS. It is expected that new drugs being developed will be even more effective. At present a combination of 3 of these drugs is producing better remissions and apparent cure in some instances.

What about blood transfusion and blood donation?

You cannot catch AIDS from donating blood. Since about 1985 all blood donations have been screened for the HIV antibody before being transfused, and so there is almost no risk of getting it from a transfusion now.

What is safe sex?

'Safe sex' means sexual activities in which semen, vaginal secretions or blood are not exchanged between sexual partners. It includes touching, cuddling, body-to-body rubbing and mutual masturbation. The proper use of condoms during vaginal, anal or oral intercourse will reduce the risk of transmitting HIV. A water-based lubricant such as KY jelly or Lubafax should be used: oil-based lubricants such as Vaseline weaken condoms.

Being responsible

HIV carriers have a responsibility to inform their sexual partners and colleagues at risk, including medical attendants, about their HIV status.

11 Common general problems

Alcohol: harmful use of alcohol

What is 'problem drinking'?

People are said to be dependent on alcohol when it is affecting their physical health and social life yet they do not seem to be prepared to stop drinking to solve their problems. The Health Council guidelines are as below:

For men, excessive drinking is more than 4 standard drinks of alcohol a day. Sensible drinking is up to 4 a day long term and maximum of 6 on 3 days of the week.

For women, drinking becomes a problem at lesser amounts—2 standard drinks a day. Sensible drinking is up to 2 a day long term and maximum of 4 on 3 days of the week.

High-risk or harmful drinking occurs at more than 6 drinks a day for men and 4 drinks a day for women.

Measuring your alcohol intake

One standard drink contains 10 g of alcohol, which is in 1 middy (or pot) of standard beer (285 mL), 2 middies of low-alcohol beer or 5 middies of super-light beer. These are equal in alcohol content to 1 small glass of table wine (120 mL), 1 glass of sherry or port (60 mL) or 1 nip of spirits (30 mL).

1 stubby or can of beer = 1.3 standard drinks
1 750 mL bottle of beer = 2.6 standard drinks
1 750 mL bottle of wine = 6 standard drinks

Standard drinks

The 0.05 level

To keep below 0.05 blood alcohol level, a 70 kg man or woman should not exceed:

2 standard drinks in 1 hour
3 standard drinks in 2 hours
4 standard drinks in 3 hours

What are the risks?

Heavy drinking damages the body; it may damage all the organs of the body, but will especially damage the liver, stomach, heart and brain. It will cause high blood pressure, gout and pancreatitis (inflamed pancreas). One serious effect is that some drinkers have blackouts of memory; others have blackouts during heavy drinking bouts only. At least 15% of all patients admitted to hospital have an alcohol-related illness and about 50% of fatal traffic accidents involve alcohol. It is a special problem for pregnant women, whose babies can be abnormal: more than 1 drink a day places the baby at risk.

Alcohol also interacts badly with many prescribed medicines, especially sedatives.

How can you get help?

If you experience problems related to drinking in yourself, cut down on the amount and frequency of social drinking. If you find this impossible, seek help without delay—you cannot fight it alone. When you attempt to stop, withdrawal symptoms may be a problem.

Get in touch with your family doctor or your nearest branch of Alcoholics Anonymous or Alanon. Some cities have direct telephone drug and alcohol services. The only way to solve the problem is to realise you have one, admit to it and then do something about it. Experience has shown that the key to success is to quit altogether, and for this reason the help of your family, your doctor and a caring organisation such as Alcoholics Anonymous is essential.

Golden rules to avoid hazardous drinking

- Do not drink daily.
- Aim for less than 12 drinks per week for men and 8 for women.
- Have at least 3 non-drinking days per week.
- Change to low-alcohol beer.
- Avoid drinking on an empty stomach.
- Avoid high-risk situations (e.g. constant parties).
- Mix alcoholic with non-alcoholic drinks.

What are the symptoms?

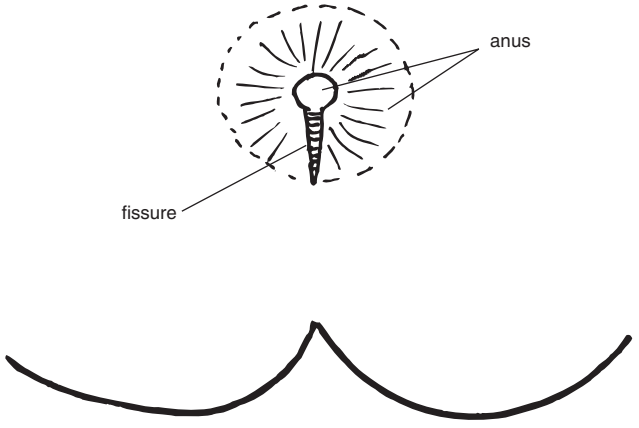
The possible symptoms or signs are as follows:

Adverse psychological and social effects	Physical effects
loss of self-esteem	brain damage (if severe)
irritability	depression
devious behaviour	insomnia—nightmares
anxiety	hypertension
paranoia	heart disease
stress	liver disease
relationship breakdown	dyspepsia (indigestion)
poor work performance	stomach ulcers
financial problems	sexual dysfunction
accidents	hand tremor
driving offences	peripheral nerve damage
crime—violence	gout
personal neglect	obesity

Anal fissure

What is an anal fissure?

It is a crack or tear at the margin of the anus that extends from the skin into the soft lining of the anus. It can affect all ages and tends to occur in women and infants.



What are the symptoms?

- sharp, often severe pain on opening the bowels
- pain or discomfort when sitting on a hard surface
- spots of blood on the toilet paper or underwear

When the bowels are opened, especially for a hard or large stool, the fissure causes spasm of the circular muscle that controls the anus. The resultant pain can last for several minutes and up to an hour.

What causes an anal fissure?

The tear, which is generally small, usually develops after stretching of the anus from passing a hard, large stool. It is associated with constipation, multiple pregnancies and Crohn's disease. Anal intercourse increases the likelihood of a fissure.

What about infants?

Anal fissures in children usually occur with constipation, and possibly result in refusal to defecate. Recovery usually occurs quickly if the stool is softened. Maltogen 1% can be added to the formula, and fluids should be increased. Treatment includes applying a local anaesthetic ointment to the anus whenever the child shows a desire to defecate, until healing occurs.

What is the usual outcome?

Adults usually recover in about 4 weeks, especially if the fissure is small. More severe cases may not heal without the benefit of a small operation.

How can anal fissures be prevented?

The secret is to avoid constipation and answer nature's call to stool when it comes instead of putting it off. Stools are kept soft by drinking several glasses of water each day, by a high-fibre diet and by regular exercise. Some people may find it necessary to use laxatives such as ispaghula (Fybogel, Agiolax).

What is the treatment?

- Prevent constipation; keep the stool soft.
- Gently clean the anus with cottonwool and warm water after each bowel movement.
- Apply a towel soaked in very warm water for painful spasm or take a sitz bath (20 cm of warm water with a small amount of added salt in the bathtub) for about 20 minutes twice a day.
- Take analgesics such as aspirin or paracetamol for pain.
- Apply petroleum jelly (Vaseline) or zinc oxide ointment around the anus to soothe the area.
- A special ointment containing local anaesthetic or a dilute version of ointment used for angina (Rectogesic) may be prescribed by your doctor to relieve discomfort. It is prone to cause strong headaches.
- A modern technique is to inject botulinum toxin into the sphincter. You can discuss this with your doctor.

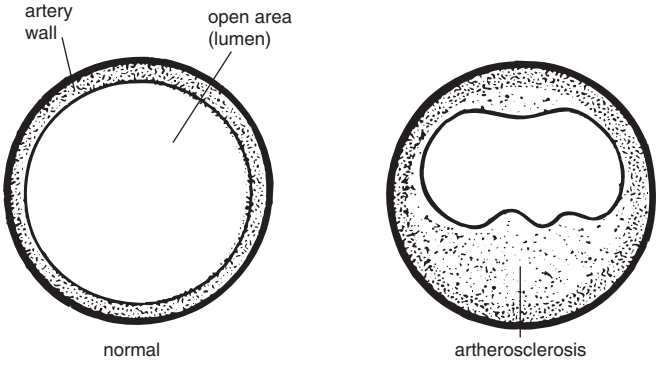
Surgical treatment

If the fissure persists despite all the above attention, some minor procedures will certainly allow it to heal quickly in a few days. This may involve stretching the anus under anaesthetic or cutting the anal sphincter (muscle) under local anaesthetic.

Angina

What is angina?

Angina (also known as *angina pectoris*) is the name given to pain in the chest that comes from the heart when it is short of oxygen. The heart is a large muscle that pumps blood about every second, and if it cannot get enough oxygen from its own blood supply (the coronary arteries) it will develop a 'cramping' pain rather like a cramp in the calf of the leg. The main cause of angina is a narrowing of the coronary arteries by a fat-like deposit called *atheroma*. It is a common problem and affects over half a million Australians.



Cross-section of a coronary artery

What are the symptoms?

Angina is typically a dull, heavy discomfort or pain in the centre of the chest. It has been described as 'pressure', 'tightness', 'heaviness' and 'like indigestion'. The pain can spread to the neck (throat), the jaw, the back or the arms (usually the left arm).

Additional symptoms may include shortness of breath, sweating, nausea and tiredness.

What brings on angina?

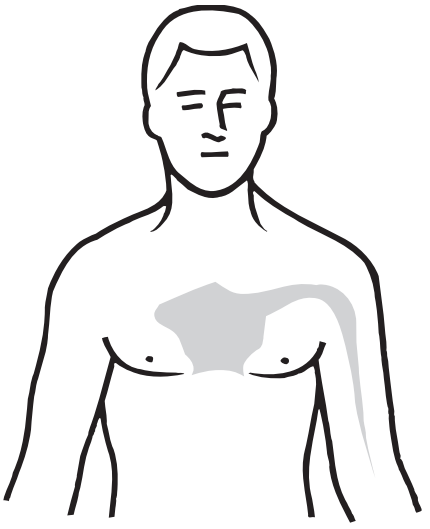
Angina characteristically appears during physical activity and fades away when the exertion stops. It can also be brought on by highly emotional situations (e.g. anger, fright, excitement), cold weather or after a heavy meal. People who smoke heavily or are overweight are more likely to suffer from angina.

What are the risk factors for angina?

Smoking, high blood pressure, a high blood cholesterol level, obesity and diabetes increase the risk of getting angina. There is also a tendency for it to run in families.

Is angina dangerous?

Angina is a symptom that serves as a warning that the muscle of the heart is not getting enough blood and there is a risk of a heart attack. Angina does not usually cause any damage to the heart.



Commonest site of the pain of angina

What tests can be done?

Sometimes it is difficult to be sure that chest pain is true angina, and so special blood tests or an ECG (electrocardiogram) may help the diagnosis. The ECG can be performed while you are lying down (the *resting* ECG) or when stressed, such as cycling on a stationary bike (the *stress* ECG). If surgery is being considered, the state of the coronary arteries can be determined by special X-rays. All patients should be tested for high blood cholesterol.

What is the treatment?

Self-help

- If you smoke, stop.
- If you are overweight, go on a sensible diet.
- If you are inactive, take on an activity such as walking for 20 minutes a day.
- If you are tense and stressed, cultivate a more relaxed attitude to life.

Medical help

There are many tablets that can help. Anginine, which dissolves under the tongue, or a spray of the same substance under the tongue, relieves the pain. It is usual to take half an aspirin tablet each day. Your doctor will advise you about these tablets and other medication.

What are the warning signs of angina?

Patients usually cope well with their angina by using a disciplined approach to life. However, there are some warning signs that mean that the problem is worse than usual and your doctor should be notified:

- angina that lasts longer than 10 minutes
- angina pain that is more severe than normal
- Anginine tablets (up to 3) not easing the pain
- angina becoming more frequent for no apparent reason
- pain coming on at rest for the first time
- new symptoms, such as sweatiness and breathlessness

Anticoagulation therapy

Why is blood clotting important, yet dangerous?

Coagulation (the forming of clots) is a very important function of the body, especially when we get a cut and need to stop bleeding. However, clots forming inside blood vessels are dangerous because they can travel to the brain and cause a stroke or to the heart and cause a coronary attack.

Who is at risk of getting clots?

- people whose blood tends to clot easily (rare)
- people with hardening of the arteries
- people with heart problems such as a leaking valve or atrial fibrillation
- those who have just undergone surgery and are lying idle in bed, who are liable to develop clots (*thrombosis*) in the deep veins of the leg, which can travel to the heart
- those recovering from a heart attack (coronary)

What is anticoagulation?

This is the process of preventing clots in the blood by giving substances that tend to 'thin' the blood by neutralising one of the clotting mechanisms. These substances are called *anticoagulants*. Important types are heparin (given by injection) and warfarin (given orally).

How is anticoagulation regulated?

Thinning of the blood has to be carefully and safely done; otherwise, uncontrolled bleeding (*haemorrhaging*) could develop. The level of thinness is controlled by blood tests. The amount of medication is worked out from these blood tests. Different people require different doses, and so the dose is tailored for each patient.

How should anticoagulants be taken?

The first dose of warfarin is worked out and usually is 10 mg for the first day. The dosage each day is worked out according to a formula that relies on blood testing called the *international normalised ratio* (INR). The tablets should be taken every day at around the same time. Your doctor or laboratory will advise you about the dose.

What about missed tablets?

It is important not to miss taking your tablets, and you should develop a system of taking them at around the same time each day. If you miss a dose, *do not take a double dose*, but take your next dose when it is due.

What should you remember about the INR blood test?

1. Make sure it is done when ordered by your doctor.
2. Call your doctor or laboratory within 24 hours of the test just in case the dose needs adjusting.
3. Record the INR results in the record card provided.

What factors can affect warfarin?

- *Your diet*: It needs to be healthy and balanced.
- *Alcohol*: Use it in moderation and avoid binge drinking.
- *Other medications*: Check with your doctor.
- *Complementary medicines*: Check with your pharmacist, doctor or therapist.

What common medicines require special care?

Check with your doctor regarding the oral contraceptive pill, pain-killers such as aspirin, cough or cold preparations, antacids or laxatives, antibiotics and various vitamins.

What common medicines increase the effect of warfarin?

allopurinol, alcohol, amiodarone, anabolic steroids, antibiotics (most), aspirin, cimetidine, clofibrate, gemfibrozil, metronidazole, miconazole, non-steroidal anti-inflammatories, proton-pump blockers (e.g. omeprazole), phenytoin, quinine or quinidine, ranitidine, salicylates, tamoxifen, thyroxine

What common medicines decrease the effect of warfarin?

antacids, antihistamines, barbiturates, cholestyramine, diuretics, haloperidol, oestrogen, oral contraceptives, vitamin C

What signs of bleeding should you report?

black motions, blood in the urine (red or pink), easy bruising, unusual nose or gum bleeds, unusually heavy periods, unexpected bleeding after minor injury

Remember

- Keep to a consistent diet.
- Do not take aspirin or liquid paraffin.
- Always mention that you take warfarin to any doctor or dentist treating you.
- Take tablets strictly as directed without fail and have your blood tests.
- Take the tablets at the same time each day.
- Do not take a double dose.
- Advise your doctor of any illness.
- Avoid pregnancy.

Anxiety

What is anxiety?

Anxiety is an uncomfortable inner feeling of fear or imminent disaster. Most of us experience some temporary degree of anxiety in our lives, sometimes with just cause and at other times without. It can be a common normal human reaction to stress, and being anxious over appropriate things may help to make us more responsible, caring people. Some people, however, are constantly anxious to the extent that it is abnormal and interferes with their lives. Severe cases of anxiety can lead to panic attacks or hyperventilation.

What are the symptoms?

The symptoms can vary enormously from feeling tense and tired to panic attacks. Symptoms include:

- tiredness or fatigue
- dry mouth, difficulty swallowing
- apprehension: 'something awful will happen'
- sleep disturbances and nightmares
- irritability
- muscle tension/headache
- rapid heart rate and breathing
- sweating
- trembling
- diarrhoea
- flare-up of an illness (e.g. dermatitis, asthma)
- sexual problems

What are the risks?

Various physical illnesses—such as high blood pressure, coronary disease, asthma and perhaps cancer—can be related to persistent stress and anxiety. It may aggravate a drug problem such as smoking and drinking excessively. It can cause a breakdown in relationships and work performance. It can lead to the serious disorder of depression. Because an overactive thyroid can mimic an anxiety state, it is important not to overlook it.

What is the treatment?

Self-help

It is best to avoid drugs if possible and to look at factors in your lifestyle that cause you stress and anxiety and modify or remove them (if possible). Be on the lookout for solutions. Examples are changing jobs and keeping away from people or situations that upset you. Sometimes confronting people and talking things over will help.

Special advice

Be less of a perfectionist: do not be a slave to the clock; do not bottle things up; stop feeling guilty; approve of yourself and others; express yourself and your anger. Resolve all personal conflicts. Make friends and be happy. Keep a positive outlook on life, and be moderate and less intense in your activities.

Seek a balance of activities, such as recreation, meditation, reading, rest, exercise and family/social activities.

Relaxation

Learn to relax your mind and body: seek out special relaxation programs such as yoga and meditation.

Make a commitment to yourself to spend some time every day practising relaxation. About 20 minutes twice a day is ideal, but you might want to start with only 10 minutes.

- Sit in a quiet place with your eyes closed, but remain alert and awake if you can. Focus your mind on the different muscle groups in your body, starting at the forehead and slowly going down to the toes. Relax the muscles as much as you can.
- Pay attention to your breathing: listen to the sound of your breath for the next few minutes. Breathe in and out slowly and deeply.
- Next, begin to repeat the word 'relax' silently in your mind at your own pace. When other thoughts distract, calmly return to the word 'relax'.
- Just 'let go': this is a quiet time for yourself, in which the stresses in body and mind are balanced or reduced.

Medication

Doctors tend to recommend tranquillisers only as a last resort or to help you cope with a very stressful temporary period when your anxiety is severe and you cannot cope without extra help. Tranquillisers can be very effective if used sensibly and for short periods.

Recommended reading

Dale Carnegie, *How to Stop Worrying and Start Living*, rev. edn, Cornstalk, Sydney, 1999.

Ian Gawler, *Peace of Mind*, Hill of Content, Melbourne, 2000.

Jon Kabat-Zinn, *Full Catastrophe Living*, Delacorte, New York, 1990.

Ainslie Meares, *Life Without Stress*, Penguin Books, Melbourne, 1991.

Bob Montgomery & Lynette Evans, *You and Stress*, Penguin Books, Melbourne, 1995.

Norman Vincent Peale, *The Power of Positive Living*, Vermilion, London, 1996.

C Norman Shealy, *90 Days to Stress-free Living*, Element, 1999.

Aphthous ulcers

What are aphthous ulcers?

These are very painful ulcers that arise in the lining of the mouth, usually in the gums between the lower lip and teeth. The small hole on the surface exposes the sensitive tissue beneath. These mouth ulcers are not herpes infections or cancerous.

What do they look like?

The ulcers are small (about 2–3 mm across), shallow and yellow or grey in colour. Each ulcer is surrounded by a bright red halo.

Who gets aphthous ulcers?

Any person can get the ulcers. However, they occur most often in adolescents and young adults and tend to occur more often in women, especially just before a period. Aphthous ulcers are very common and affect at least 1 person in 10.

What causes aphthous ulcers?

The cause is not precisely known. One theory is that a virus or bacteria is able to ulcerate the gum surface when the immune system is below par. Known associations for this are:

- emotional or physical stress
- being 'run down'
- premenstrual tension
- injury such as from rough dentures, dental work, hot food, toothbrushing or biting the mouth
- irritation from certain foods such as citrus fruits, salted nuts, acid foods and chocolate

What are the symptoms?

The first thing you usually notice is eating something acidic (such as a grapefruit or spicy food) that makes the ulcer smart. Sometimes there is burning or tingling for several hours beforehand. The ulcers may be so painful for the first 3 days that they make eating or speaking most uncomfortable.

What is the usual outcome?

Aphthous ulcers are not a serious problem. Most ulcers heal without scarring within 10–14 days. Recurrent attacks of ulcers are quite common in some people. Any ulcer that lasts beyond 3 weeks is unusual. If the doctor is concerned about an ulcer, a blood test or biopsy may be taken.

What is the management?

In most cases the ulcer will heal without any treatment and only feel uncomfortable for 3–4 days. If the ulcer has a known cause, such as a jagged tooth or rough denture, your dentist should be consulted. Some patients simply 'grin and bear it' and wait for healing to occur without applying any agents to the ulcer; they may just take mild pain-killers. Many choose to have treatment to relieve the discomfort.

Eating and drinking

- Avoid eating spicy or sharp-tasting acidic foods (e.g. grapefruit, vinegar).
- Avoid any foods that aggravate the ulcer.
- Drink plenty of fluids and eat soft foods such as yoghurt, ice-cream and custard.
- Reduce the pain by sipping liquids through straws.

Pain relief

Apply a topical anaesthetic such as lignocaine gel or paint (e.g. SM-33 adult paint formula or SM-33 gel for children every 3 hours). This helps eating if applied before meals.

Healing methods

There are several methods that can help healing. One simple method is to rinse the mouth regularly with a salt solution (1 teaspoon to 500 mL of warm water). One of the following can be tried during the painful period of the ulcer.

- *The teabag method*: Apply a wet, squeezed out, black teabag directly to the ulcer 3–4 times daily. The tannic acid promotes healing.
- *Topical steroid paste*: Apply triamcinolone 0.1% (Kenalog in orabase) paste as soon as the ulcer appears, 3–4 times a day.
- *Topical steroid spray*: The sprays used to treat asthma (such as beclomethasone) can be sprayed onto the ulcer 3 times a day.
- *Tetracycline suspension rinse for several ulcers*: Empty the contents of a 250 mg tetracycline capsule into 20–30 mL of warm water and shake it. Swirl this solution in the mouth for 5 minutes every 3 hours. This has a terrible taste and should be spat out after rinsing.

7 The elderly

Arthritis in the elderly

Arthritis means inflamed joints, and there are many types of arthritis. The commonest type is *osteoarthritis*, which is a problem of wear and tear due to excessive use over the years and to old injuries in the affected joints. Most cases of arthritis are mild, and people cope with it. Arthritis does not necessarily get worse as you get older; sometimes it can get less painful (arthritis in the lumbar spine is a good example of this).

What are the symptoms of osteoarthritis?

- pain, swelling or stiffness in one or more joints
- pain or stiffness in the back or neck
- pain and stiffness after heavy activity such as gardening or housework or long walks and on getting up in the mornings; light activity might actually relieve some of the symptoms
- painful limp in the case of the hip and knee

Which joints are affected?

Osteoarthritis mostly affects the weight-bearing joints such as the spine, knees and hips. The base of the thumb, the ends of the fingers and the big toes are also common sites.

What is the treatment?

There is no cure, but there are many ways to make life more comfortable and keep you mobile and independent.

Diet

Keep your weight down to avoid unnecessary wear on the joints. No particular diet has been proved to cause, or improve, osteoarthritis.

Exercise

Keep a good balance of adequate rest with sensible exercise (such as walking, cycling and swimming), but *stop* any exercise or activity that increases the pain.

Heat

It is usual to feel more comfortable when the weather is warm. A hot water bottle, warm bath or electric blanket can soothe the pain and stiffness. Avoid getting too cold.

Physiotherapy

This can be most helpful in improving muscle tone, reducing stiffness and keeping you mobile.

Walking aids

Shoe inserts, good footwear and a walking stick can help painful knees, hips and feet.

Medication

Aspirin and paracetamol are effective pain-killers. Your doctor may prescribe special antiarthritic medications, which should be taken with food. Inform your doctor if you have had a peptic ulcer or get indigestion. There are new drugs which are kinder to your stomach. Glucosamine has proved effective for osteoarthritis of the knee.

Special equipment

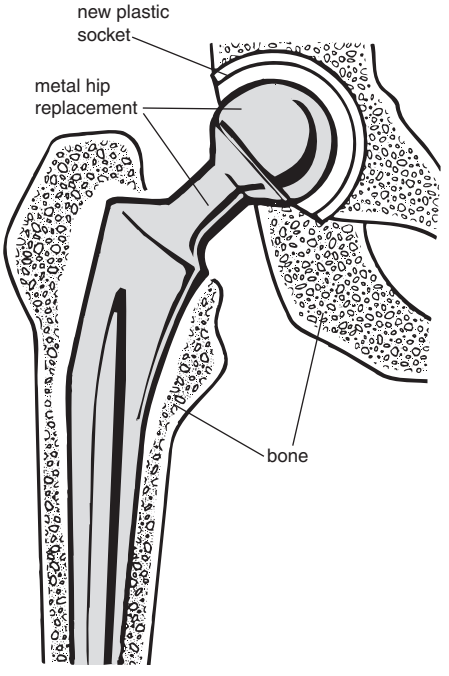
It is possible to increase your independence at home. There is a wide range of inexpensive equipment and tools that can help with cooking, cleaning and other household chores. These can be discussed with your physiotherapist or occupational therapist.

Surgery

Modern surgery can give excellent results with relief of severe pain for most joints. The new techniques and artificial joints are improving all the time, and so there is no need to suffer with severe pain.

Osteoarthritis of the hip

Replacement of your worn-out joint with an artificial hip made of a combination of metal or plastic is a very common operation. More than 90% of these are most successful.



Total hip joint replacement

Osteoarthritis of the knee

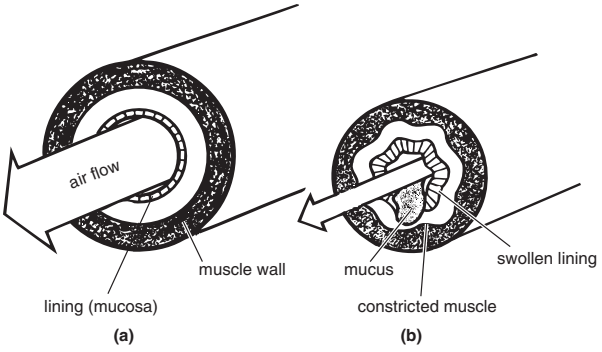
Special injections of lubricating fluids for the knee are now available. The results are very promising.

Modern knee replacements are also giving excellent results, and if you have crippling knee pain this operation can give great relief.

Asthma

What is asthma?

Asthma is a common chest condition in which there is temporary narrowing of the breathing tubes in the lungs (airways) because they are hyperreactive (oversensitive). In asthma these tubes have inflammation and swelling of their linings, increased mucus inside, tightening of the muscles in their walls and therefore less flow of air in and out.



(a) Normal airway; (b) airway in asthma

What causes an attack?

No single cause has been found, but a variety of factors may trigger an attack. A check list of trigger factors is:

- infections, especially colds
- allergies (e.g. to dust, pollens, mould)
- exercise, especially in a cold atmosphere
- emotional upsets or stress
- house dust, especially the dust mites
- cigarette smoke; other smoke and fumes
- sudden changes in weather or temperature
- occupational irritants (e.g. wood dust, synthetic sprays, chemicals)
- drugs (e.g. aspirin, drugs to treat arthritis, heart problems and glaucoma)
- certain foods and food additives

What are the symptoms?

The main symptoms are breathlessness, tightness in the chest, wheezing and coughing (especially at night).

Severe asthma

Symptoms or signs of very severe asthma are anxiety, blue colour of the lips (*cyanosis*), ashen grey colour of the skin, fast pulse, rapid breathing, indrawing of the chest wall, difficulty speaking, no response to asthma medication and feeling very sick. These uncommon severe symptoms mean that you should seek urgent medical attention—they are 'call the ambulance' signs.

How common is asthma?

About 1 child in 4 or 5 has asthma, usually in a mild form. It usually comes on between the ages of 2 and 7. Many children appear to 'grow out of it' by puberty, but a small number have it again as adults. Others continue with it. About 1 in 10 adults has asthma.

What are the risks?

Severe mismanaged asthma can retard the growth of children, but the biggest worry (although uncommon) is the number of preventable deaths (including sudden deaths), especially in those who do not realise how severe the attack really is. With correct treatment, most people with asthma should be able to lead normal lives.

What is the treatment?

Prevention of attacks is the best treatment, and all people with asthma and their families need to know how to manage their asthma well.

Know your asthma

- Read all about it and be informed.
- Try to identify trigger factors and avoid them.
- Become expert at using your medicine and inhalers. A big problem is incorrect inhaler technique (up to 80% of patients).
- Know and recognise the danger signs and act promptly.
- Have regular checks with your doctor.
- Have physiotherapy: learn breathing exercises.
- Work out a clear management plan and an action plan with your doctor for when trouble strikes.
- Learn the value of your lung function with spirometry.
- Always carry your reliever inhaler and know how many doses are left.

Stay at your best

If you need medications, these should be as simple, safe and effective as possible. This is why inhaled medications are most often used for asthma. There are basically three types of inhaled medication that your doctor might advise you to use:

- the 'preventor' (such as Pulmicort, Flixotide, Tilade or Intal)
- the 'reliever' (such as Bricanyl, Oxis, Ventolin or Atrovent), which is called a *bronchodilator*
- combined preventor and reliever (such as Seretide or Symbicort)

Key points

- Get to know how severe your asthma is.
- Avoid trigger factors such as tobacco smoke.
- Keep at your best with suitable medicines.
- Get urgent help when danger signs appear.
- Have a written action plan for asthma.
- Use your inhalers correctly and use a spacer if necessary (check your method with your doctor or asthma educator).
- A peak flow meter may help you assess severity.
- Have regular reviews with your doctor when well.

Asthma: correct use of your aerosol inhaler

Did you know that 90% of the medication from metered dose inhalers (also known as puffers) sticks to your mouth and does not reach your lungs?

Why all the fuss about inhalers?

It is very important to use your inhaler correctly so that the medication in the spray reaches deep into your lungs to treat your asthma. A faulty inhaler technique is a common cause for medication not working properly. It is important to know that it is your *inhalation* technique—*not* the pressure from the aerosol pushing in—that gets the medication into your lungs. Why not ask your doctor, asthma educator or pharmacist to check your use of your inhaler?

What are the two main techniques?

The *open mouth technique* and the *closed mouth technique* are the main techniques, but the closed mouth technique is the preferred one.

Most children from age 7 can learn to use puffers quite well.

The closed mouth technique

1. Remove the cap. Shake the puffer vigorously for 1–2 seconds. Hold it upright (canister on top) to use it (as shown).
2. Place the mouthpiece between your teeth but do not bite it and close your lips around it.
3. Breathe out slowly and gently to a comfortable level.
4. Tilt your head back slightly with your chin up.
5. Just as you then start to breathe in (slowly) through your mouth, press the puffer firmly, once. Breathe in as far as you can over 3–5 seconds. (Do not breathe in through your nose.)

The closed mouth method

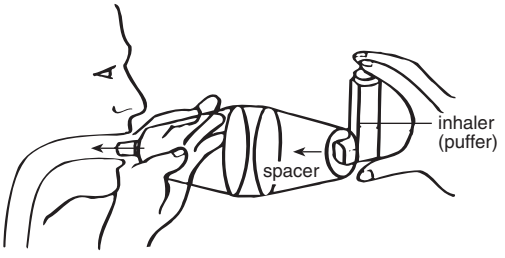
6. Remove the puffer from your mouth and hold your breath for about 10 seconds; then breathe out gently.
7. Breathe normally for about 1 minute, and then repeat the inhalation if you need to.

Common mistakes

- holding the puffer upside down
- holding the puffer too far away
- pressing the puffer too early and not inhaling the spray deeply
- pressing the puffer too late and not getting enough spray
- doing it all too quickly: not breathing in slowly and holding your breath
- squeezing the puffer more than once
- not breathing in deeply
- not holding your breath for 10 seconds

Large and small volume spacers

Many people who have trouble using inhalers can have a special 'spacer' fitted onto the mouthpiece of the inhaler. 1 puff of the aerosol is put in the spacer. Then you breathe in and out from its mouthpiece. Take 4 normal-sized breaths. This method is useful for adults having trouble with the puffer and for children of all ages. Spacers are very efficient and cause less irritation of the mouth and throat.



Using a spacer—rule for all: a single puff at a time then inhale

Extra points

1. The usual dose of a puffer (reliever) is 1 or 2 puffs every 3–4 hours for an attack.
2. If you do not get adequate relief from your normal dose, you should contact your doctor.
3. It is quite safe to increase the dose, such as to 6–12 puffs.
4. If you are using your inhaler very often, it usually means your other asthma medication is not effective or is not being used properly. Discuss this with your doctor.

Asthma: dangerous asthma

What are the symptoms and signs?

Failure to recognise the development of a severe asthma attack has cost the lives of many people. Most people cope with their asthma nicely, but doctors are concerned about the fact that some die when it could be prevented.

Asthma has to be treated with great care. The more you know about it, the better you can recognise danger.

Who are likely to be at high risk?

People who have experienced one or more of the following are more likely to have a severe attack:

- a previous severe asthma attack
- frequent visits to the emergency department
- hospital admission in the past 12 months
- 3 or more medications to control symptoms
- reliance on reliever medications (e.g. more than 3 times a week)
- inadequate treatment and poor adherence
- denial of asthma
- aspirin- or food-triggered attacks

Remember that severe attacks can start suddenly (even in mild asthmatics) and catch you by surprise.

Why is peak expiratory flow measurement important?

Although recognising deterioration of your symptoms is important, people who have moderate to severe asthma may also obtain a *peak expiratory flow* (PEF) meter and measure their PEF. It tells you how well your lungs are working. Most people over 8 years can test PEF accurately.

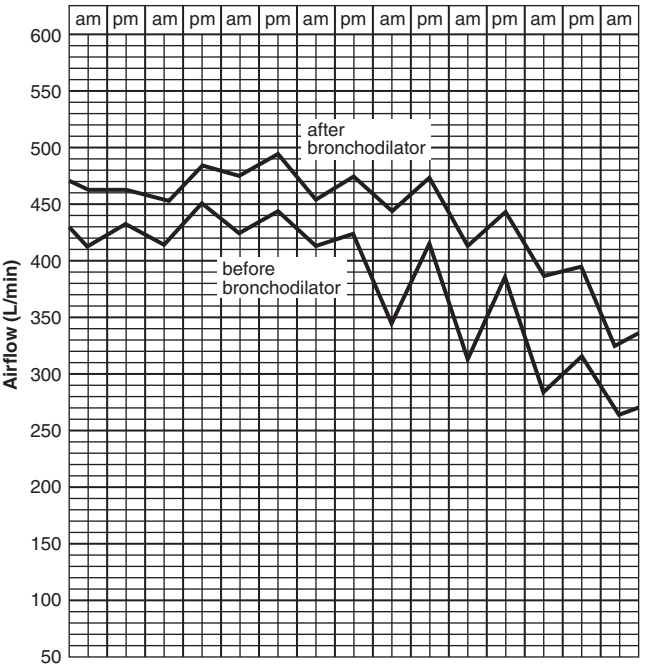
Warning signs of deterioration using PEF are:

- falling of your PEF and poor control
- readings less than 80% of your normal best
- readings less than 100 L/min
- more morning dipping than normal
- erratic readings
- less response to your bronchodilator than normal

What are the early warning signs of severe asthma or an asthma attack?

- symptoms persisting or getting worse despite adequate medication
- increased coughing and chest tightness
- poor response to 5 inhalations of relievers
- benefit from reliever inhalations not lasting 2 hours
- increasing medication requirements
- sleep being disturbed by coughing, wheezing or breathlessness
- chest tightness on waking in the morning
- low peak expiratory flow readings

Contact your doctor if these problems are present.



Typical peak expiratory flow record showing signs of worsening asthma

What are the really dangerous signs?

Any of the following problems tell us that asthma is 'out of control':

- marked breathlessness, especially at rest
- waking at night with asthma
- asthma getting worse quickly rather than slowly, despite medication
- feeling frightened
- difficulty in speaking: unable to say more than a few words
- exhaustion
- drowsiness or 'not with it' feeling
- chest becoming 'silent' with a quiet wheeze, yet breathing still laboured
- blue or blue-grey colour
- chest wall drawing in
- a feeling that asthma is out of control
- respiratory rate greater than 25 (adults) or 50 (children)

Action plan

If any of these are present, *immediately*:

- Call an ambulance and say 'severe asthma attack' (*best option*).
  or
- Call your doctor.
  or
- If you are having trouble finding medical help, get someone to drive you to the nearest hospital.

Keep using your bronchodilator inhaler continuously if you are distressed.

Get an action plan such as the National Asthma Campaign 'Asthma first aid 4 × 4 plan' from your doctor.

Atopic eczema

What is atopic eczema?

Eczema refers to a red, scaly, itchy, sometimes weeping skin condition. *Atopy* refers to an allergic condition that tends to run in families and includes problems such as asthma, hay fever, atopic eczema and skin sensitivities. However, anyone can become allergic.

Atopic eczema is common and affects about 5% of the population. It is not contagious. No particular cause has been found.

What are the symptoms?

In mild cases the skin is slightly red, scaly and itchy and covers small areas. In infants it usually starts on the face and scalp; in severe cases it can cover large areas, is very itchy and starts to weep and become crusted. The children may be very irritable and uncomfortable.

What ages are affected?

Eczema usually starts in infants from any age. It tends to improve from 1 to 2 years, but the rash may persist in certain areas, such as the flexures of the elbows and knees, the face and neck, and the fingers and toes. It tends to be coarse, dry and itchy at this stage. Many children have outgrown it by late childhood, most by puberty, but a few have it all their lives.

What are the risks?

It is not a dangerous disease, but infection can occur from scratching, especially if the skin is raw. Contact with herpes simplex (cold sores) can produce nasty reactions. Patients have a tendency to develop asthma and other 'atopies' later.

What things appear to aggravate eczema?

- sand, especially sandpits
- dust, especially dust mites
- soaps and detergents
- rough and woollen clothes
- abrasive surfaces e.g. carpets, sheepskin
- scratching and rubbing
- frequent washing with soap, especially in winter
- drying preparations such as calamine lotion
- extremes of temperature, especially cold weather with low humidity and heat
- stress and emotional upsets
- teething
- certain foods (which parents may identify)

Note: The relationship of diet to eczema is controversial and uncertain. It may be worthwhile avoiding certain suspect foods for a 3–4 week trial—these include cow's milk, fish, eggs, wheat, oranges and peanuts.

What about skin tests and injections?

The value of allergy testing is doubtful, and 'desensitisation' injections may make the eczema worse.

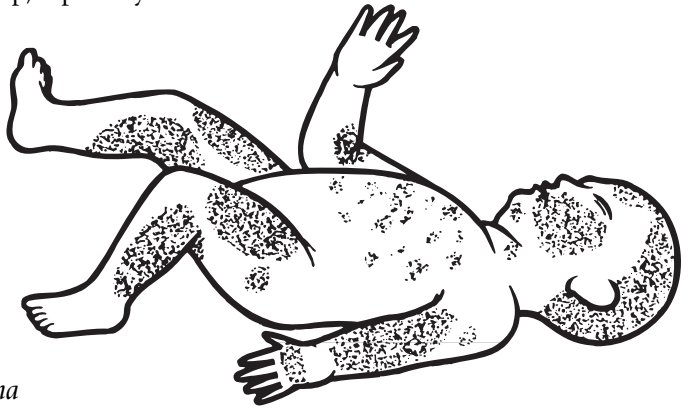
What is the treatment?

Self-help

- Avoid soap and perfumed products—use a bland bath oil in the bath (e.g. QV, Alpha Keri) and a bland cleansing agent (e.g. Sorbolene cream).
- Apply a moisturising agent to dry, irritated skin three times a day. Use Sorbolene cream or paraffin creams (e.g. Dermeze, Redmin, Egozite baby cream) or others that help.
- Older children and adults should have short, tepid showers.
- Avoid rubbing and scratching—use gauze bandages with hand splints for infants.
- Avoid sudden changes of temperature, especially those that cause sweating.
- Wear light, soft, loose clothes such as cotton clothing, which should always be worn next to the skin.
- Avoid dusty conditions and sand, especially sandpits.
- Consider house dust mite eradication steps.

Medical help

Your doctor, who should be consulted if you are concerned, may prescribe antihistamine medicine for the allergy and sedation, special moisturising creams and lotions, antibiotics for infection (if present) and milder dilute corticosteroid creams, which can be very effective.

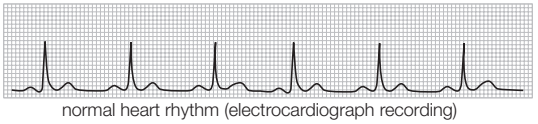


Typical sites of infantile eczema

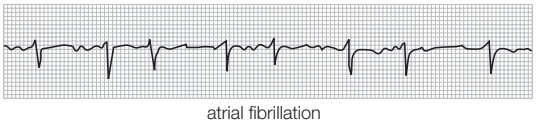
Atrial fibrillation

What is atrial fibrillation?

Atrial fibrillation (*AF*) is a specific irregular rhythm of the heartbeat. Fibrillation means an uncoordinated quivering movement of muscle fibres. Heart function involves the contraction of two chambers, the smaller *atrium* which connects to the larger *ventricle*. The heart's electrical conduction system runs from the atrium to the ventricle with the 'firing' beginning in the atrium. In atrial fibrillation the atrium beats too fast and the ventricle cannot keep pace and beats at a slower and more irregular rate than the atrium. The heart still pumps out blood, usually faster but not as efficient as normal.



normal heart rhythm (electrocardiograph recording)



atrial fibrillation

What are the symptoms?

Often there are no symptoms. The most common complaint is palpitations which is an awareness of faster (racing) or more powerful heartbeats. AF is the most likely diagnosis if a person describes a rapid and irregular heartbeat. Other symptoms include weakness, chest pain (angina), dizziness or faintness.

How common is atrial fibrillation?

It is very common especially with increasing age but it can occur at any age. It affects about 1 in 10 people over 70 years of age.

What are the causes and risk factors?

The main causes are:

- coronary artery disease with or without a previous heart attack
- overactive thyroid (thyrotoxicosis)
- hypertension
- rheumatic heart disease especially mitral stenosis
- cardiomyopathy including excess alcohol

About 15% of cases are called *lone fibrillators* because no obvious cause can be found. Some are young people and these seem to have a good outlook. It is also seen in older people. It appears to be related to dysfunction of the autonomic nervous system and comes on after meals and exercise.

Risk factors for AF include:

- increasing age
- drugs including some prescribed drugs
- excessive alcohol including binge drinking
- smoking

What are the risks?

The main danger is the risk of small blood clots forming in the atria from abnormal blood flow. The clots can travel through the circulation and block a smaller artery—this is called *embolism*. The main concern is an embolus to the brain causing a stroke. This risk is higher in older people.

A common complication is heart failure which usually causes shortness of breath.

It is important to realise that AF can come and go, with periods of normal heart function between attacks.

What should be done?

It is important to consult your doctor if you suspect atrial fibrillation. It is diagnosed by taking an electrocardiogram (ECG) of the heart. It may be necessary to be connected to a special carry-around monitor for a couple of days to record your heart rhythm. Another common investigation is an echocardiogram especially to diagnose mitral valve disease or cardiomyopathy. Your doctor will usually refer you to a heart specialist (cardiologist) who is very skilled at managing this common condition.

What is the treatment of atrial fibrillation?

The treatment is based on the cause which may mean treating an overactive thyroid. Some patients may require no treatment but it is given especially if AF is causing symptoms and is of recent onset. It is important to control the heart rate as much as the rhythm. If a decision is made to stop AF it is done by the process of *cardioversion* which can be performed either through special medication or by an electric direct current shock under a light anaesthetic. The issue of preventing blood clots especially to avoid strokes is always considered. It depends on the cause of AF and the age of the patient. If a blood-thinning agent is used either warfarin or aspirin is chosen.

Preventive measures

- Avoid smoking.
- Drink alcohol in moderation.
- Follow an optimal healthy diet.
- Exercise regularly.
- Avoid social or illicit mind-altering drugs.
- Avoid over-the-counter decongestants.
- Have your blood pressure checked regularly.
- Minimise stress.

Seek medical help if you notice:

- a change in heart rate, rhythm or strength
- shortness of breath
- swollen feet
- chest pain
- pain in the calf on walking
- unusual symptoms such as unexplained weakness
- weight loss

Autism

What is autism?

Autism, described first by Kanner in 1943, is a developmental disorder commencing in the first 3 years of life. It affects at least 8 children in 10 000; boys are 4 times more likely than girls to be affected. The main features are:

- inability of the child to form normal social relationships, even with his or her own parents
- delayed and disordered language development (about one-half of all autistic children never learn to speak effectively)
- obsessive and ritualistic behaviours such as hand flapping, spinning, twiddling pieces of stick or string and hoarding unusual objects
- restricted range of interests
- lack of imagination and difficulty in development of play
- anxiety over changes in routine

It is now recognised that there are a variety of types of autism, hence the modern term 'autistic spectrum disorder'. Asperger's syndrome is one of the important types.

What is the cause?

The cause of autism is unknown and no one particular anatomical, biochemical or genetic disorder has been found in those who suffer from it. It now appears to have multiple causes. The problem appears to lie in that part of the brain responsible for the development of language.

What are the symptoms?

Many autistic children appear physically healthy and well developed. However, they may show many disturbed behaviours. As infants they may cry a lot and need little sleep. They resist change in routine and often refuse to progress from milk and baby food to a solid diet. They avoid eye contact and often behave as if they are deaf. Normal bonding between mother and child does not occur and prolonged bouts of crying do not respond to cuddling. As the children get older and more agile they may show frequent tantrum behaviour, destructiveness, hyperactivity and a disregard for danger, requiring constant supervision to prevent harm to themselves or their environment.

The diagnosis is best made by a team of experts observing the child, but remains difficult under the age of 2 years. There are no laboratory tests available.

What is the treatment?

There is no medical treatment for autism, although some medications may help for some of the symptoms. If there is a deterioration in behaviour or skills, a thorough medical check is required because the autistic child does not indicate pain or communicate clearly. Best results are obtained by early diagnosis, followed by a firm and consistent home management and early intervention program. Later the child will benefit from remedial education, either in a specialised facility or in a regular school with specialist backup. Speech therapy can help with language development, and non-speaking children can be taught alternative methods of communication.

Most difficult behaviours can be reduced or eliminated by a program of firm and consistent management.

What is the outlook?

Behavioural and emotional problems may get worse in adolescence, especially during sexual development. Most autistic children have some degree of mental retardation, although some may have normal or superior intelligence. Only about 5% will progress to the stage of independent living and open employment as adults. Most require at least some degree of lifelong support in order to remain within the community and enjoy a good quality of life. As their life expectancy is normal, this represents a considerable commitment from their families and community support services.

Autistic persons have an increased risk of developing epilepsy, and many suffer psychiatric complications such as anxiety, depression and obsessive-compulsive disorder as they get older. These require appropriate medical treatment.

Where to seek advice

Consult your general practitioner, who may refer you to a paediatrician or child psychiatrist. Assistance can also be obtained from Autism Associations in each state, which can provide full information regarding assessment and diagnostic services, management programs and family support services.

Autism: Asperger's syndrome

What is Asperger's syndrome?

Also known as high-functioning autism, *Asperger's syndrome* is one of the autism spectrum disorders which presents in childhood with impairments in social interaction and a restricted range of interests and activities. More boys than girls are diagnosed with Asperger's syndrome. It is a developmental disability and is due to a difference in the way the brain develops, leading to particular difficulties in processing certain types of information. People with Asperger's syndrome can learn social rules and behaviours and so minimise or reduce their disability, but their fundamental difficulties tend to persist throughout life.

What are the typical features?

People with Asperger's syndrome may have difficulty:

- understanding the rules of social behaviour and communication (e.g. how to greet someone appropriately and take turns in conversations)
- 'reading' the facial expressions and body language of others (e.g. noticing the signs that someone is bored, happy or sad)
- understanding metaphor, common expressions, sarcasm or irony. They tend to interpret language in very concrete and literal ways (e.g. when told to 'pull up their socks', they will look down at their feet and wonder what to do with their clothing)
- forming friendships with peers

They also:

- have a restricted range of interests and activities, and tend to have a detailed knowledge of these narrow areas (e.g. knowing all about dinosaurs, trains, bus timetables or weather patterns)
- have fixed rigid rituals and routines that they follow and become extremely distressed if not able to do so (e.g. bed time routines, having coffee in the same cafe each morning)

What social difficulties do they have?

People with Asperger's syndrome usually want to have friends and be part of social networks, but their difficulties in knowing how to behave appropriately and in reading the emotions and responses of others often lead to teasing, bullying, exploitation, ostracism and social isolation.

The narrow focus of their interests, and their desire to discuss these interests at length with little understanding of how others are responding, can lead to avoidance or rejection by others.

Their distress at interruption of their routines and rituals can lead to outbursts of anger that may seem unpredictable and unwarranted to others.

What communication difficulties do they have?

There is usually no significant delay in the child developing speech and many will have quite advanced verbal abilities for their age. There can, however, be limitations in how much they understand of the content and implications of what they say. They have difficulty comprehending and manipulating abstract concepts and the abstract use of language, for example in idiom, metaphor, humour and sarcasm. They may also be unaware of, or confused by, the complex interplay of language content, tone of voice, facial expression, body language and social context that comprise a communication message, and so may misinterpret what is said or be misunderstood by others.

What is their intellectual ability?

People with Asperger's syndrome generally have normal intellectual ability. There are particular patterns seen on psychometric testing that help in making a diagnosis. They usually demonstrate an ability to memorise organised data but do not have good powers of imagination.

How is it diagnosed?

There are no specific blood or imaging tests. The diagnosis is made after assessment and testing by skilled paediatricians, psychiatrists or psychologists.

What is the cause?

The precise cause of Asperger's syndrome is not known, but genetic causes are thought to be most likely in the majority of cases. No specific genetic markers have yet been found.

What is the treatment?

There is no cure for Asperger's syndrome, but there is much that can be done to help the child or adult and their family. A diagnosis leads to understanding and facilitates access to support groups and further sources of information. The basis of intervention is helping the person and their family and friends understand their difficulties, and to explicitly teach specific social rules, behaviours and skills as required.

Further information

Victorian Government Disability Online information:

www.disability.vic.gov.au/dsonline

Dr Tony Attwood has written articles, presentations and books on Asperger's syndrome:

www.tonyattwood.com.au/

Victorian Asperger's Syndrome Support Network:

http://home.vicnet.net.au/~asperger/

10 Musculoskeletal disorders

Backache

What causes backache?

Backache usually is caused by minor strains in the muscles or ligaments, but more serious lower back pain usually is the result of an injury to one of the many joints in the base of your spine. The joints include the *facet joints* and *discs*, which when disturbed can push against painful tissue or nerve roots just behind them. The injury usually happens while bending your spine forwards (flexing it), especially while lifting something heavy.

Never bend forward with your legs straight to perform any task. Once you have experienced back trouble, it has a tendency to recur, and so be careful to protect your back.

How can you care for it?

Adjust your activity to your back discomfort. Take care with posture, making beds and so on. Avoid fatigue. Ideally you should perform a set of exercises to strengthen the muscles of your spine and abdomen.

Sport and exercise

Be careful of sudden twisting movements and sudden overloading of muscles, as in cricket, golf, squash, sailing, weightlifting and horse riding. Walking, jogging (avoid hard surfaces) and swimming are good activities if you can manage them.

Sitting

Avoid sitting for long periods, especially in the car. Your knees should be higher than your hips and your back straight. Maintain the hollow in your back.

Bed rest and sleep

Use a low pillow and lie on your side. Do not lie face-up or face-down. Use a firm mattress.

Lifting

Avoid lifting anything heavier than 10 kg (20 lb). Squat close to the load and keep your back straight. Do not stoop over the load to get a grip and pick it up. Lift using your knees and legs (not your back) as leverage. Keep your back straight, not bent forwards or backwards.

Your weight

Being overweight adds an extra burden to your back, so it is important to keep as close to your ideal weight as possible. Exercise helps to avoid this problem.

Acute episodes of pain

It is best to keep active and keep up your normal mobility (if possible) when your back hurts. If the spasms are severe, you will need to lie down on a firm surface.

Scrubbing floors and gardening

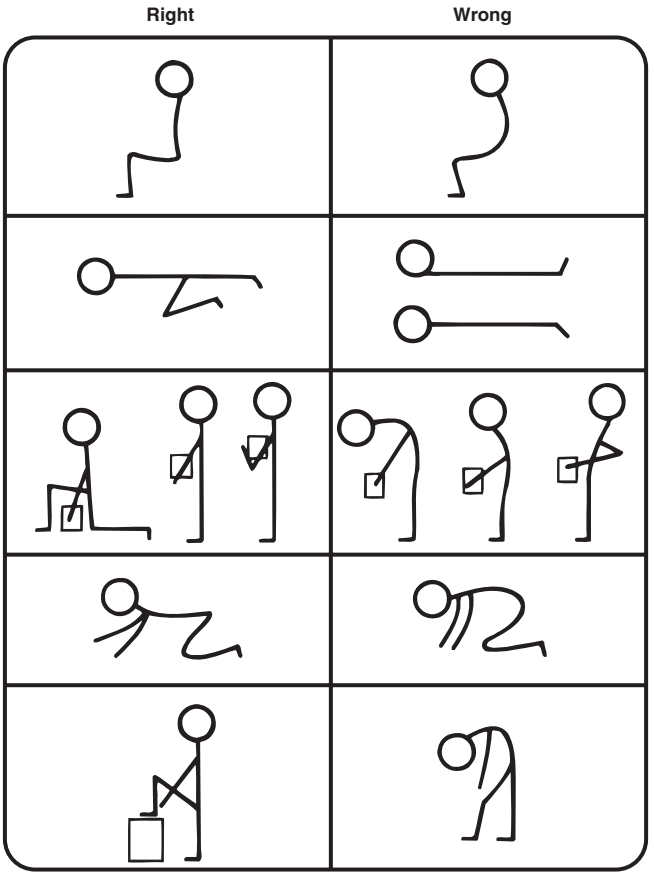
Your hands should be as far forward of you as necessary to keep your back straight. Do not flex your back by having your hands working too close to your knees.

Bending

Take care when bending, for example tying shoelaces or putting on stockings. Put your foot on a stool, chair or box that is near enough to your body and high enough so that you do not have to bend down to your foot.

Pain relief

The recommended analgesic is paracetamol or a drug you can buy across the counter. It is best to avoid strong narcotic drugs. Ask your doctor.



Rules of care for sitting, lying, lifting and bending

Bacterial meningitis and meningococcus

What is meningitis?

Meningitis is an inflammation of the meninges which are the thin membranes that cover the brain and the spinal cord. Infection can be caused by viruses—which is more common—or by bacteria—which is more serious and life threatening. Bacterial meningitis is basically a childhood infection. Very young children are at the greatest risk although it can occur in any person.

What is meningococcal meningitis?

Bacteria called *Neisseria meningiditis* or meningococcus can cause a particularly deadly infection, especially in children between birth and 5 years of age and in adolescents and young adults between 15 and 24 years. It is spread through close contact with saliva from activities such as kissing and sharing drink bottles, and also by nasal droplets from sneezing. This infection can take the form of meningitis or septicaemia (severe infection of circulating blood), or both simultaneously. The affected person rapidly becomes sick and may develop a rash. The red rash can be misleading because it looks like any heat rash at first but then the deadly sign of purpura (bleeding into the skin) develops. Early diagnosis and treatment with antibiotics is critical. Untreated cases may be fatal or result in permanent brain damage.

What are frequent symptoms and signs?

- fever
- headache
- nausea and vomiting
- pallor
- lethargy/tiredness
- increasing irritability
- drowsiness
- neck stiffness
- sensitivity to light
- altered conscious state e.g. confusion
- delirium

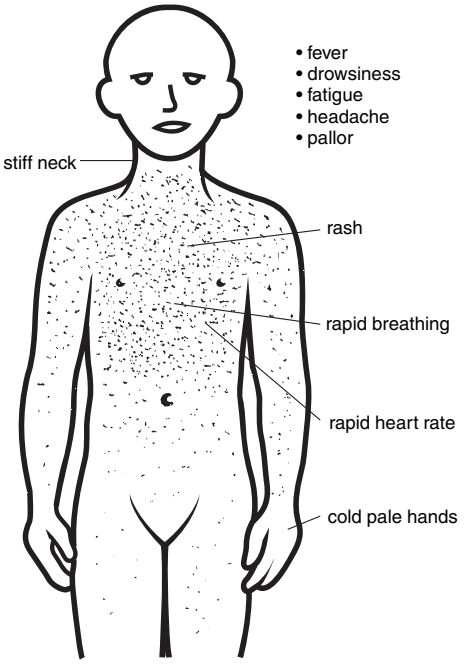
As a general rule the illness seems like the flu at first and we must emphasise that it can be difficult to diagnose in the early stages. Doctors prefer to see people early rather than later, when the patient will be very sick.

In infants the signs of meningitis may not be so obvious but neck stiffness, vomiting and headache are more noticeable in children over 3 years of age. These symptoms may be masked and confuse the diagnosis if the child is on antibiotics. The diagnosis is made by lumbar puncture (usually), blood tests or brain scans.

When is urgent attention necessary?

If your child develops any of the following 'red flag' signs report immediately to your doctor or hospital emergency department:

- becomes 'flat' quite rapidly
- cold pale skin especially of the limbs



Signs of meningococcal meningitis

- change in conscious state
- drowsiness, confusion or delirium
- rapid heart rate
- rapid, difficult or noisy breathing
- convulsion
- red rash, especially if it looks like flecks of blood

What is the treatment?

Patients will be admitted to hospital initially to confirm the diagnosis and to identify the causative bug. Treatment is by large doses of antibiotics which are usually fed directly into a vein by means of an intravenous drip. This procedure may be necessary for up to two weeks. The patient will require strict bed rest, probably in a darkened room, plenty of fluids, and analgesics for any pain. Barrier nursing to prevent spread of infection will be required.

What are preventive measures?

Seek medical care for any persistent infection especially in the upper respiratory tract. Avoid contact with a person who has meningitis. Oral antibiotics are given for the following contacts of a person with meningococcal disease. Those who:

- live in the household and are aged less than 24 months
- have kissed the patient in the previous 10 days or shared saliva, e.g. drink bottles, cigarettes
- have attended the same day care centre, kindergarten, school or university class

A new meningococcal vaccine is available but it may not cover all strains. Check with your doctor who can advise you about immunisation. Immunisation is recommended against Haemophilus and Pneumococcus which are other causes of bacterial meningitis.

Bed-wetting (enuresis)

What is *nocturnal* enuresis (bed-wetting)?

It refers to bed-wetting at night in children (or adults) at a time when control of urine could be reasonably expected.

What is normal?

Bed-wetting at night is common in children up to the age of 5. About 50% of 3-year-olds wet their beds, as do 20% of 4-year-olds and 10% of 5-year-olds. It is considered a problem if regular bed-wetting occurs in children 6 years and older, although many boys do not become dry until 8 years. Bed-wetting after a long period of good toilet training with dryness is called *secondary enuresis*.

What causes it?

There is usually no obvious cause, and most of the children are normal in every respect but seem to have a delay in development of bladder control. Others may have a small bladder capacity or a sensitive bladder. It tends to be more common in boys and seems to run in families. Most bed-wetting episodes occur in a deep sleep, and so the child cannot help it. The cause of secondary enuresis can be psychological; it commonly occurs during a period of stress or anxiety, such as separation from a parent or the arrival of a new baby. In a small number of cases there is an underlying physical cause, such as an abnormality of the urinary tract. Diabetes and urinary tract infections may also be responsible.

Should the child be checked by your doctor?

Yes; this is quite important, as it will exclude the rare possibility of any underlying physical problem (such as a faulty valve in the bladder) that might cause bed-wetting.

How should parents treat the child?

If no cause is found, reassure the child that there is nothing wrong, and that it is a common problem that will eventually go away. There are some important ways of helping the child adjust to the problem:

- Do not scold or punish the child.
- Praise the child often, when appropriate.
- Do not stop the child drinking after the evening meal.
- Do not wake the child at night to visit the toilet.
- Use a night light to help the child who wakes.
- Some parents use a nappy to keep the bed dry, but try using special absorbent pads beneath the bottom sheet rather than a nappy.
- Make sure the child has a shower or bath before going to kindergarten or school.

When should you seek professional help?

Seek help if there is:

- continued bed-wetting by children aged 6 or 7 years that is causing distress
- ongoing wetting during the daytime
- bed-wetting starting after a year's dryness

What are the treatment options?

Many methods have been tried, but the bed-wetting bell and pad alarm system is generally regarded to be the most effective. If the child has emotional problems, counselling or hypnotherapy may be desirable. Drugs can be used and may be very effective in some children, but they do not always achieve a long-term cure and have limitations.

A new agent called desmopressin, which is sprayed into each nostril at night, seems to be very effective if the alarm system is ineffective.

The bed alarm

There are various types of alarms: some use pads in the pyjama pants and under the bottom sheet, but recently developed alarms use a small bakelite chip, which is attached to the child's briefs by a safety pin. A lead connects to the buzzer outside the bed, which makes a loud noise when urine is passed. The child wakes, switches off the buzzer and visits the toilet. This method works well, especially in older children.

Key points

Bed-wetting:

- is not the child's fault
- rarely has an emotional cause
- gets better naturally
- nearly always clears up before adolescence
- requires a gentle, non-interfering approach
- responds well to an alarm from 7 years

Bell's palsy

What is Bell's palsy?

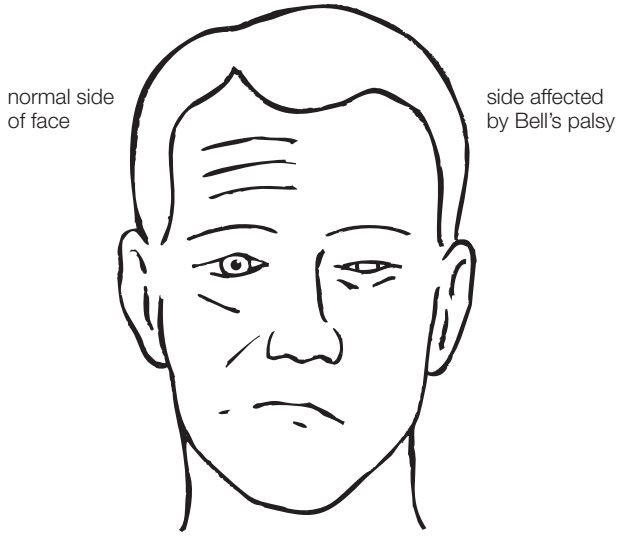
It is a condition where the muscles on one side of the face become paralysed because of a problem in the nerve (called the *facial nerve*) that controls those muscles.

What are the symptoms?

The main symptom, which comes on quite suddenly (maybe overnight), is weakness of one side of the face. The corner of the mouth droops, the eye cannot close properly and actions of the face such as smiling and frowning look out of shape.

Other possible symptoms include:

- ear pain
- difficulty eating
- sounds amplified
- drooling of saliva
- partial loss of taste



Bell's palsy

How common is Bell's palsy?

Each year about 1 person in 2000 gets Bell's palsy. It can occur at any age, but is most common in young adults. It appears to be associated with diabetes and hypertension.

What is the outcome?

Although scary, Bell's palsy is usually not a serious or permanent problem. Cases can vary from being mild and barely noticeable to being quite obvious. At least 90% make a good recovery. The slow and steady recovery takes about 6 months. Operations to help correct the problem are used occasionally for those rare cases where recovery is not complete.

What is the cause of Bell's palsy?

We are not certain what causes this problem, although a viral infection causing inflammation of the nerve or the nearby ear may be a cause in some instances. An immune reaction may also be a factor.

The facial nerve leaves the brain through a very small hole in the base of the skull near the ear. The nerve becomes swollen, and because of the tight fit in this hole it does not work properly.

What is the treatment?

The palsy usually recovers without special treatment. If you see the doctor as soon as it develops, a course of antiviral or steroid tablets may be prescribed. Although the use of steroids (cortisone) is controversial there is some evidence that starting treatment early does help.

Care of the eye

If your eye cannot close fully, it is important to protect it from injury such as dust and grit by wearing goggles and putting a patch over the eye at night. The eye should not be allowed to dry, and artificial tears are usually prescribed. Report any unusual pain in your eye immediately.

Massage and exercises

Massaging and exercising the facial muscles may help recovery. Using oil or cream, massage the muscles of the forehead, cheek, eyes and lips. Exercise these muscles in front of a mirror by screwing up the eyes tightly to close them, smiling widely, baring the teeth and winking.

Heat treatment

If you have pain in the face, apply heat 3 times a day to the painful area. Wring out a face washer after soaking it in hot water and apply for 10 minutes. Make sure your eye is closed or covered.

General care

Continue your normal activities, but choose a good lifestyle by getting plenty of rest and sleep, avoiding smoking and excess alcohol.

Look after your teeth: brush and floss your teeth more often.

Keep a positive outlook on life. Remember that your somewhat embarrassing problem should soon settle.

Bereavement

When a loved one dies, the bereaved person invariably goes through a predictable human process of grieving.

The extent of the reaction will depend on circumstances such as the suddenness and unexpectedness of the death. It will depend also on the age of the deceased and the bereaved, and other factors such as personal, family, national or religious customs and habits. However, no matter what the circumstances, the bereaved will suffer a reaction and the emotions described here are regarded as normal responses.

The first stage

'Shock' or disbelief

The immediate reaction is for you to simply feel numb and empty. For a short time you may feel and behave almost as though nothing has happened—everything is a blur—but eventually extreme grief may take over. During this first stage, delusions of seeing or speaking with the dead person may occur: although this may disturb you, the experiences are normal. There is also a tendency to forget that the person is dead and act as though he or she were alive. You will find it difficult to concentrate and may give vent to spontaneous emotions such as crying, screaming or even laughing.

The second stage

Grief and despair

At this stage the loss of your loved one will really hit you. This sense of loss is reinforced by loneliness, by constant reminders of lost habits and experiences, and by the clothes and other personal effects left behind. You will feel intensely sad and lonely. Friends and acquaintances will not visit you so much now and, in fact, many will feel uncomfortable and embarrassed about approaching you. It is important that you understand this problem. You may actually feel like withdrawing from people.

The sense of presence of the deceased will continue. Two common feelings, anger and guilt, will also surface.

Anger

This may include anger towards those considered responsible for the death and even at the deceased for dying. Your resentfulness may include blaming and accusing the medical attendants of neglect. You will feel like talking a lot about your loved one, and you will probably recall all the vivid memories leading up to the death and constantly churn them over in your mind. Common recurring thoughts include:

- 'Why did it happen to me?'
- 'If only 'so and so' had been done, it would be different.'

Guilt and self-blame

You may feel guilty because you did not do more for the person or take more notice of him or her. Such guilt feelings and intense grief are commoner when the death is unexpected. It is important that you do not feel too badly about any apparent neglect on your part—the 'if only I had' feeling.

The feeling of intense grief usually lasts about 6 weeks and the second stage of grief for about 6 months, but it can resurface every now and then over the next few years. During the last 4 months or so of this stage you will feel sad and helpless, then pass into a state of apathy and depression (the third stage).

The third stage

Adaptation or acceptance

After about 6 months you will begin to accept your severe loss. You develop a change in living habits by taking up new roles and activities. You can face up better to disposing of personal effects, establishing new relationships and attending to financial arrangements.

This phase takes a year or so and requires considerable understanding by all concerned. However, the feelings of apathy and depression can be a problem. Physical illness is common and includes problems such as insomnia, wheezing, diarrhoea and stomach pains. It is important to consult your doctor about any worrying physical or mental problems. Despite this, you will adapt and eventually learn to cope.

Self-help

First, you must realise that it is normal to pass through these stages of grieving, and so you cannot fight it. A bereaved person should always try to acknowledge his or her loss and not 'shut it out'. Talking about the deceased to relatives and friends and sorting out the person's possessions will help enormously in coming to terms with your loss, even though it may be painful at first. At the beginning it is good, if possible, to see the dead person, touch them if you want to, attend the funeral and give expression to your emotions.

If you have doubts about the exact cause of death, make sure that you discuss it with your doctor as soon as possible.

If you have prolonged intense grief feelings, make sure that you get professional help. Avoid visiting spiritualists: they seem to aggravate the problem.

You may find considerable support from others who have suffered a similar loss and from various self-help organisations. Most people find that it is helpful to have a break away from the home, especially staying with sympathetic friends or relatives in a different area or in another state.

The first anniversary of a death or the first Christmas spent alone can be a very difficult time, and so it is good to make arrangements to have company at that time.

Dyslexia and other SLDs

What is a specific learning disability (SLD)?

It is an unexpected and unexplained condition, occurring in a child of average or above average intelligence who has a significant delay in one or more areas of learning. SLDs are commoner than realised and affect about 10% of children.

What learning areas are affected?

- reading
- spelling
- writing
- arithmetic
- language (comprehension and expression)
- attention and organisation
- co-ordination
- social and emotional development

What causes general learning difficulties?

General learning difficulties have many causes, including deafness, immaturity, intellectual handicaps, absence from school, poor teaching, visual handicaps, chronic illness, head injuries, meningitis, language disorders, autism, environmental and emotional disadvantages and SLDs.

What causes SLDs?

SLD is really a descriptive term. The primary cause is unknown. There may be multiple subtle factors causing the SLD.

How are SLDs diagnosed?

If the problem is not picked up by parents, any undisclosed learning problem will soon be picked up in the classroom. Sometimes the disability is not picked up until later (from the age of 8 onwards), when more demanding school work is required. SLDs vary from very mild to quite severe. Speech delays, reading problems and calculation problems are among the first signs. The child will then be assessed medically, including his or her hearing and vision. If a physical problem such as poor vision can be detected, the child will be referred to a specialist in this area.

What effects do SLDs have?

Apart from having delayed learning at school, many children with SLDs have difficulty in coping with life in general. They are subject to ridicule by other children and tend to develop a poor self-image and low self-esteem. The problem may manifest as a behaviour disorder. Both the child and the family suffer, especially if the cause is not clear to them.

What is dyslexia?

Dyslexia is an SLD with reading. A dyslexic child has below average reading skills yet has no physical problems and has a normal IQ. Other SLDs may be present, particularly with spelling, writing and clear speaking.

Dyslexia is a term derived from the Greek for 'difficulty with words'. It was originally called 'word blindness'.

What are the features of dyslexia?

The two main features are reading and spelling difficulties because the child confuses certain letters whose shapes are similar but have different positions, perhaps mirror images. Examples include confusing *b* with *d* and *p* with *q*. This means that the child cannot properly use and interpret the knowledge that he or she has acquired.

Characteristics include:

- a reluctance to read aloud
- a monotonous voice when reading
- following the text with the finger when reading
- difficulty repeating long words

The above features, of course, are seen in all or most learners, but if they persist in a bright child dyslexia should be considered. The most important factor in management is to recognise the problem, and the earlier the better.

What is the management of SLDs?

It is important to build the child's self-esteem by explaining the problem carefully, removing any sense of self-blame and encouraging efforts towards progress. Parents can play an important role in building up their child's self-esteem and in helping learning. Parents are the most important teachers.

Children with SLDs are usually referred to an experienced professional or to a clinic such as a dyslexia clinic for assessment. The management may involve a clinical psychologist, an audiologist, an optometrist or a speech pathologist. A specific method of correcting the problem and promoting learning will be devised. It is also worthwhile seeking the help of a support organisation.

Bipolar disorder

What is bipolar disorder?

Bipolar disorder is a disorder of mental function in which the person's mood can swing between two ('bi') poles ranging from the elated hyperactivity of mania on the one hand to the flatness of depression on the other. It was previously called *manic-depressive illness*.

How common is it and who gets it?

About 1 in 100 people in the population suffers from bipolar disorder. It tends to run in families, and men and women are equally likely to develop it. The usual age of onset is in the late teens or twenties (especially). It has a tendency to develop in some women after childbirth or during the menopause.

What causes bipolar disorder?

The cause is believed to be a combination of factors including genetics, biochemistry and stress. Studies point to a genetic transmission including the observation that children of parents with it have an increased risk. There is thought to be a chemical imbalance in the brain which can be corrected with appropriate medication. Stress may be responsible for triggering the problem in some cases.

What is normal and abnormal?

A normal person has a fluctuation or swinging of moods varying from moderate liveliness to moderate lethargy depending on circumstances from day to day or month to month. It is normal to feel flat sometimes and elated at others. However, people with bipolar disorder have extreme moods unrelated to external events. They are prone to exhibit behaviour which is uncharacteristic and not usually socially acceptable. They may have periods of normal human behaviour lasting for a short time or for many months sandwiched in between the two extremes of mania and depression. The degree of bipolar disorder can range from mild to severe. Some people may only experience episodes of mania or hypomania without sliding into depression. Most sufferers are able to lead relatively normal lives.

What are the symptoms?

The mania 'pole'

This phase is where the mood is mainly elevated, irritable and argumentative. Close relatives or associates are more likely to recognise the beginning of the manic phase than the sufferer who may have no insight into their condition. It usually begins with a less severe degree of mania (called *hypomania*) which may stay at this stage or progress to the manic stage.

Stage 1: Hypomania

- increasing activity and restlessness; 'high'
- reduced sleep; early waking
- leaping out of bed early and vigorously
- talkative; fast speech
- easily distracted
- decreasing work performance
- enthusiastically starts (rarely finishes) new projects
- increased sexual drive and activity

Stage 2: Mania

- 'high as a kite'
- reckless behaviour (e.g. spending sprees, running up debts, sexual promiscuity)
- wild, garrulous speech
- grandiose ideas and plans
- impaired judgement/lack of insight
- hasty decisions (e.g. job resignation, marriage)
- paranoia
- racing thoughts; flights of ideas

They may be out of touch with reality such as having delusions (false beliefs) or hallucinations. Behaviour may include singing, dancing or laughing for no reason.

The depression 'pole'

There are typical depressive symptoms but with a tendency to be more severe with bipolar disorder. The onset is gradual and sufferers become increasingly withdrawn and lose interest in things that they normally enjoy. There is a slowing down of many basic functions such as energy, appetite, sex drive, speech and movement. Sleep is affected. Problems multiply with pessimism, guilt feelings and reduced self-esteem and confidence. Some feel unable to face the world and that life is not worth living and may stay shut in their room.

Thoughts about death and suicide are common and indicate the need for urgent attention.

What should be done?

Since the illness is most easily treated in its early stages it is best to see or speak to a doctor ASAP if you suspect that either yourself or an acquaintance is bipolar. Doctors often rely heavily on information from people other than the patient to make the diagnosis. Sufferers tend to lack insight, fail to realise their problem and tend to conceal it from their doctors. There are no available diagnostic laboratory tests.

What is the treatment of bipolar disorder?

The good news is that it responds well to modern medications which aim to correct an apparent chemical imbalance in the nervous system. Examples of these 'mood stabilisers' are lithium, valproate and carbamazepine. Antidepressants are used for the depressive phase. The treatment should be carefully supervised so that relapses can be prevented. Supportive psychotherapy is also important. Patients with severe episodes, especially the first one, usually require hospitalisation. With appropriate treatment and support, most people with bipolar disorder can lead full and productive lives.

Bites and stings

Bites and stings from animals, spiders and insects in Australia are commonplace, but fatal bites are uncommon. In fact, only 1 in 20 bites from the funnel-web spider causes a serious problem. The following information is a summary of first aid treatment for some bites and stings.

Snake bites

First aid

1. Keep the patient quite still.
2. Do not wash or cut the wound.
3. Immediately bandage the bite site very firmly, but not too tightly. A crepe bandage is ideal; it should extend above the bite for about 15 cm.
4. Place the limb that has been bitten in a splint: use a firm stick or slab of wood.
5. Get the patient to the nearest doctor or major hospital without delay. If possible, take the dead snake along too.

Tick bites

Ticks may lodge anywhere in the body of humans and their bite can be fatal, especially in children.

First aid

Do not attempt to pull the tick out by grasping the body. Take the patient to someone who is expert at removing them. If this is not possible, pour vinegar onto the tick, wait 30 seconds, then loop a strong thread around the tick's head close to the skin and pull it sharply sideways.

Blue-ringed octopus stings

Children playing in small rock pools around sea shores are most likely to be stung.

First aid

Seek medical attention immediately. Mouth-to-mouth resuscitation may be necessary.

Spider bites

The Sydney funnel-web and the red-back spiders are the most dangerous. Unlike bites from snakes, spider bites are painful.

First aid

The first aid for the Sydney funnel-web is exactly the same as for snake bites. For red-back spider bites, apply an icepack but do not bandage. Then seek medical help.

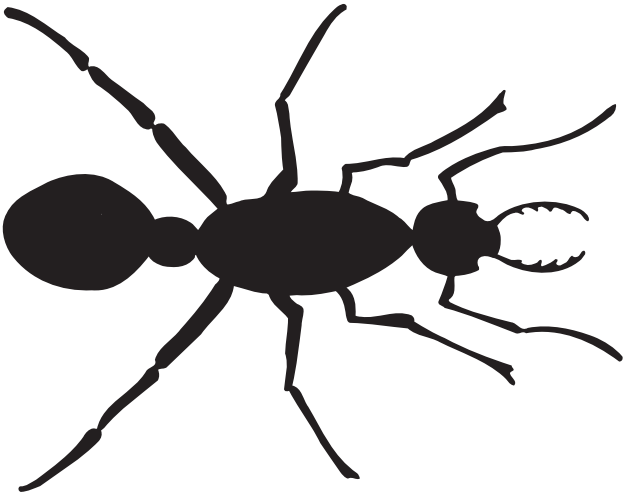
Bee stings

First aid

1. Scrape the sting off sideways with a fingernail or knife blade. Do not squeeze it with the fingertips.
2. Apply ice to the sting site.
3. Rest and elevate the limb that has been stung.

Other bites and stings

These include bites from ants, wasps, bluebottles, scorpions and centipedes.



First aid

1. Wash the site with large quantities of cool water.
2. Apply vinegar or Stingose to the wound for about 30 seconds.
3. Apply ice for several minutes.
4. A soothing anti-itch cream then can be used.
5. Medicine is not usually necessary.
6. Seek medical aid if any unusual problems develop.

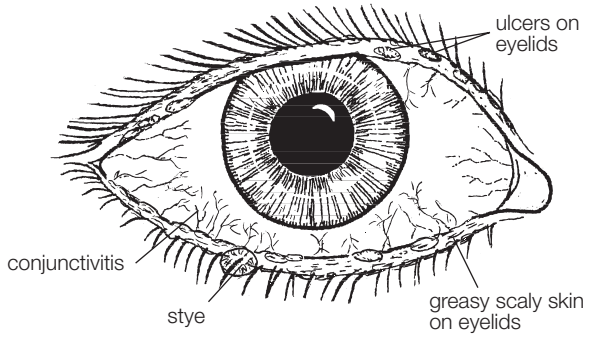
Note

The box jellyfish (sea wasp) in tropical waters is very dangerous. Liberal amounts of vinegar should be applied as soon as possible.

Blepharitis

What is blepharitis?

Blepharitis is chronic inflammation of the margins of the eyelids. It can involve the eyelids, eyelashes, conjunctiva (whites of the eye) and the meibomian glands (those which lubricate the eye).



What are the symptoms and signs?

Generally there is a persistent and unsightly redness and scaliness of the skin on and around the eyelid margins.

Other problems may include:

- persistent soreness of the eyelids or eyes
- greasy appearance of the eyelid margins
- flakes of skin, like dandruff
- eyelashes that fall out
- small ulcers on the eyelid
- crusting and bleeding (if severe)
- irritation of the eye (from flakes)
- sensation of 'something in the eye'
- grittiness, burning, itching and dryness
- discharge from the lids, causing lashes to glue together during sleep
- sensitivity to light
- swelling of the eyelids and conjunctiva

What are the three main causes or types?

- *seborrhoeic blepharitis*: associated with seborrhoeic dermatitis
- *rosacea blepharitis*: associated with rosacea of face
- *staphylococcus blepharitis*: due to infection with the bacteria *Staphylococcus aureus*

What are the complications of blepharitis?

Apart from infection with *Staphylococcus* any of the following can occur:

- styes (infection of an eyelash)
- meibomian cyst infection
- conjunctivitis
- ulceration of the conjunctiva (white of eye) or cornea (clear covering of eye)
- loss of eyelashes
- scarring of eyelids
- misdirected eyelash growth (e.g. inwards)

What is the expected outcome?

Blepharitis is a chronic inflammation which is stubbornly resistant to treatment. It can be controlled and sometimes cured in about 6–12 months but tends to recur.

What is the treatment?

- *Eyelid hygiene* is the key to successful treatment. The crusts and other debris on the eyelids should be gently cleaned with a cottonwool bud dipped in clean warm water or a weak solution of sodium bicarbonate (baking soda) or a 1 in 10 dilution of baby shampoo. This should be done once or twice daily depending on the severity. An alternative is to apply a warm water or saline soak with gauze for 20 minutes followed by a rest for 60 minutes before bathing the eyelids again.
- Control scalp seborrhoea with anti-dandruff shampoo (e.g. Head and Shoulders shampoo).
- Eye lubricants such as artificial tear preparation will relieve the symptoms of dry eyes.
- Avoid wearing eye make-up while inflammation is present.
- Discontinue wearing contact lenses until the problem has cleared.

Medication

- Short-term use of a cortisone eye ointment applied to the margins after washing will give relief.
- Antibiotic ointment should be smeared on the lid margin regularly if infection is present.
- Your doctor may find it necessary to prescribe a combined cortisone and antibiotic ointment.
- Oral antibiotics may be prescribed in the presence of lid abscess or associated rosacea.

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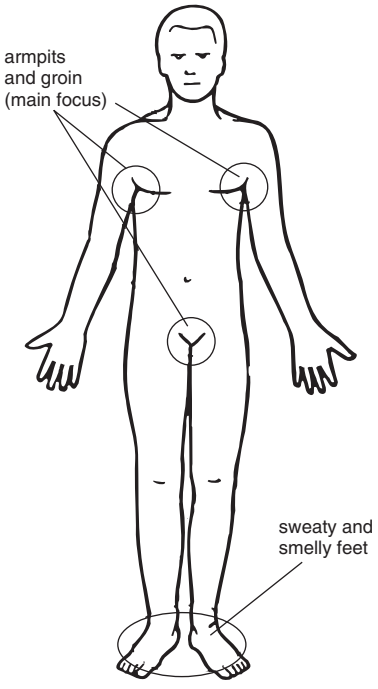
Body odour

Body odour is an unpleasant smell that is a social embarrassment for many people.

What causes body odour?

It is usually caused by a combination of inadequate or incorrect attention to personal hygiene and excessive perspiration from the armpits and groin. The old saying 'Make sure you do an APC (armpits and crotch) wash' is sound advice. Certain types of bacteria that are present on our skin can cause a strong odour in some people who perspire heavily.



Common types of body odour

What medical conditions cause body odour?

Body odour can be caused by an infection in the vagina, by kidney failure or by taking certain social drugs such as marijuana.

What is the treatment?

There are many ways to manage body odour and come up 'smelling like a rose'.

Scrubbing the body

Thoroughly scrub the body, especially the armpits and groin, with water and a deodorant soap. A good deodorant soap is pine soap. It is preferable to scrub morning and night under the shower, since the sweat glands and bacteria are active day and night. If the soap is not working, use an antibacterial surgical scrub (which your pharmacist can supply).

Choose suitable clothes

Choose natural fabrics such as cotton and wool that absorb perspiration better than synthetics. They also allow better evaporation of the sweat from the fabric.

Keep your clothes fresh

Regular washing of clothes is important. Using the same underwear for up to seven days is a certain way to cause bad smells, so change each day, especially in the summer months. A daily change of your shirt or blouse is also advisable and regular laundering or dry-cleaning of stale coats, trousers and skirts is essential.

Underarm antiperspirant deodorants

Ask your pharmacist for the most suitable antiperspirant deodorant. Do not use a deodorant only.

Dietary advice

It is important to watch what you eat, as some foods contribute to body odour. Avoid or reduce the intake of garlic, fish, curry, onions and asparagus. Reduce your intake of caffeine (coffee, tea and cola drinks), which stimulates sweat activity.

Care of smelly feet

If your feet are sweaty and smelly, make sure that you change your socks (should be cotton or woollen) regularly. Use shoe liners such as Odor Eaters or charcoal inner soles. Also use a special solution such as Driclor or Hidrosol or the new preparation Neat Feat.

Shaving hair under the arms

Shaving the hair from the armpits is certainly essential in women with a body odour problem.

Surgery

If you perspire heavily from the armpits, the sweat glands can be surgically removed by a simple procedure called *axillary wedge resection*. Ask your doctor to arrange this if necessary.

Desperate measures

If all else fails, you can try the 'old skunked dog trick' by taking a bath in dilute tomato juice. Pour 2 cups of tomato juice in your bath water and sit in it for 15 minutes before scrubbing with a deodorant soap. This is reported to be very effective.

Bow legs and knock knees

Bow legs and *knock knees* are relatively common in infants and children but are usually no cause for concern. They are stages that children pass through and it is important to remember that most legs are perfectly straight by the teenage years.

Bow legs (genu varum)

Bow legs are very common up to the age of 3 years. In fact, they are quite normal up to the age of 2 or 3. This means that when the ankles are touching the knees are apart. Bow legs usually correct themselves when the child starts walking, so much so that from about the age of 4 there is a tendency for the child to develop knock knees.

How can you check progress?

If you are concerned about the extent of the bow legs, the problem can be monitored by measuring the distance between the knees (DBK). If this is greater than 6 cm and not improving at 4 years and older, it is advisable to have them checked by your doctor.

Knock knees

Knock knees are also normal in children and most have these between the ages of 3 years and 8 years. Running can be awkward, but improves with age.

The rule for normal 3-year-olds is:

- 50% have 3–5 cm between the ankles (DBA)
- 25% have more than 5 cm

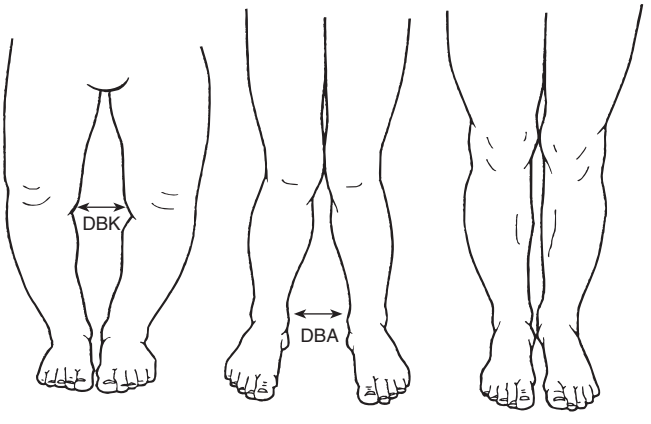
These invariably straighten nicely after 8 years.

How can you check progress?

For any concerns about the degree of knock knees, measure the distance between the ankles (DBA). It should be checked by your doctor if the DBA is greater than 8 cm after the age of 8 years and not improving.

Rules in summary

It is normal for:
Bow legs 0–3 years
Knock knees 3–8 years
Legs straight by adolescence



Bow legs *Knock knees* *Mature position of legs*

Breastfeeding and milk supply

Difficulties with breastfeeding are common, especially in the first week after birth. As a rule, the milk, which is present all the time, 'comes in' at any time from 24 hours after birth. It is common for the breasts to become engorged early on, but in some there is insufficient supply.

Engorged breasts

What is engorgement?

In some women, a few days after delivery the milk supply comes on so quickly that the breasts become swollen, hard and sore. This is called *engorgement*. There is an increased supply of blood and other fluids in the breast as well as milk.

What will you notice?

The breasts and nipples may be so swollen that the baby is unable to latch on and suckle. The soreness makes it difficult for you to relax and enjoy your baby.

How are engorged breasts managed?

- Feed your baby on demand from day 1 until he or she has had enough.
- Finish the first breast completely; maybe use one side per feed rather than some from each breast. Offer the second breast if the baby appears hungry.
- Soften the breasts before feeds or expressing with a warm washer or shower, which will help get the milk flowing.
- Avoid giving the baby other fluids.
- Express a little milk before putting the baby to your breast (a must if the baby has trouble latching on) and express a little after feeding from the other side if it is too uncomfortable.
- Massage any breast lumps gently towards the nipple while feeding.
- Apply cold packs after feeding and cool washed cabbage leaves (left in the refrigerator) between feeds. Leave an opening for the nipple. Change the leaves every 2 hours but do not overuse them.
- Wake your baby for a feed if your breasts are uncomfortable or if the baby is sleeping longer than 4 hours.
- Use a good, comfortable brassiere.
- Remove your bra completely before feeding.
- Take paracetamol regularly for severe discomfort.

Remember that regular feeding is the best treatment for your engorged breasts. Follow your demand and your baby's demand. As your breasts are used in this way, they gradually become softer and more comfortable.

Insufficient supply

This is sometimes a problem in mothers who tend to be under a lot of stress and find it hard to relax. A 'let down' reflex is necessary to get the milk supply going, and sometimes this reflex is slow. If there is insufficient supply, the baby tends to demand frequent feeds, may continually suck his or her hand and will be slow in gaining weight.

Remember that there is always some milk present in your breasts.

What should you do?

- Try to practise relaxation techniques to help condition your 'let down' reflex.
- Put the baby to your breast as often as he or she demands, using the 'chest to chest, chin on breast' method.
- Express after feeds, because the emptier the breasts are, the more milk will be produced.
- Make sure you get adequate rest, but if you feel overly tired go to your doctor for a checkup.

Bronchiolitis

What is bronchiolitis?

Bronchiolitis is a chest infection in which there is inflammation of the *bronchioles*, which are the smallest branches of the respiratory tree of the lungs. This results in narrowing and blockage of the small air passages with mucus, leading to a negative effect on the transfer of oxygen from the lungs to the bloodstream.

Bronchiolitis can be confused with bronchial asthma or the effects of an inhaled foreign object.

What is the cause of bronchiolitis?

It is caused by one of the common respiratory viruses, especially respiratory synctial virus. The virus appears to have a particular tendency to target the bronchioles in infants. It is a contagious condition which is usually spread from droplets released into the air by coughing. It can also be spread by hand contact with secretions from the nose or lungs. Bronchiolitis usually occurs in the winter months.

Who gets bronchiolitis?

It typically affects babies from 2 weeks to 12 months especially under 10 months of age.

What are the symptoms?

At first the infant usually develops symptoms of a mild common cold with a runny nose, fever and cough for about 48 hours. As the infection progresses over the next day or so, the following irritations develop:

- irritating cough
- wheezing
- rapid breathing

These more severe symptoms last about 3–5 days.

In a very severe episode there are:

- retractions of the chest and abdomen ('see-saw' movements)
- hypoxia (lack of oxygen)
- possible cyanosis (blue lips or skin)

What is the expected outcome?

The wheezing usually lasts for about 3 days only, and as it settles the child gradually improves. Most babies can be treated at home and are usually better in 7–10 days. The cough can last up to a month or so.

Does bronchiolitis recur?

It usually occurs once only but can recur. Some infants can have recurrences in the first 2 years and some develop bronchiolitis after every cold, especially if there is an underlying tendency to asthma. Some infants with recurrent bronchiolitis may eventually develop asthma. However, most infants with recurrent wheeze will not develop asthma.

What are the risks or complications?

In some cases the infection is severe and the children become depleted in essential oxygen and fluids. They require hospitalisation. Complications, including secondary bacterial pneumonia, are uncommon.

What is the treatment?

There is no particular medicine, including antibiotics, that cures bronchiolitis because it is a viral infection. It gets better naturally but care is required.

Home management

Milder cases (the majority) can be managed at home.

- Paracetamol is recommended for fever.
- The important issue is to keep up plenty of fluids especially in the very young. Give 1–2 extra bottles a day or more frequent breastfeeds. If feeding is difficult give smaller quantities more often.

Hospital management

More severe cases with respiratory distress need to be admitted and given oxygen and special feeding.

When to seek help

Seek help if any of the following occur:

- worsening cough and wheeze
- poor fluid intake—refusal to feed, fewer wet nappies, less than half normal intake over 24 hours
- difficult rapid breathing
- difficulty with sleeping
- blueness around the lips
- child generally flat and ill

Key points

- Bronchiolitis is a viral infection in the first year of life.
- It usually gets better in 7–10 days.
- Antibiotics will not cure it.
- Extra fluids are usually needed.
- It usually is a once only condition.
- Some children get recurrences over 2 years.

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Bronchitis: acute bronchitis

What is bronchitis?

Bronchitis is inflammation of the mucus lining of the bronchial tree (air passages) of the lungs. The inflammation affects the trachea, the large bronchial tubes (called *bronchi*) and the smaller bronchial tubes (called *bronchioles*).

Acute bronchitis refers to the sudden onset of this inflammation, while the term *chronic bronchitis* refers to the more serious long-term condition which follows repeated attacks of acute bronchitis.

What is the cause?

Acute bronchitis is almost always caused by one of the many common respiratory viruses. Most cases begin with an upper respiratory infection such as the common cold. The infection spreads from the nose and throat down the trachea into the bronchial tubes.

Another cause is inflammation from breathing air that contains airborne pollutants such as chemical fumes, dust and smoke that irritate the bronchial tree.

What are the symptoms?

The main symptom is an irritating cough that produces little or no sputum initially but may later bring up greyish or yellowish sputum called phlegm.

Other symptoms include:

- wheezing
- breathlessness
- fever
- discomfort (a feeling of pressure) behind the sternum, made worse by coughing

How common is acute bronchitis and who gets it?

An occasional attack of acute bronchitis is very common especially in those who live in an unpolluted dry environment and who do not smoke cigarettes. It is relatively rare in fit healthy people.

The risk of getting an attack increases with:

- smoking
- cold or humid weather
- areas of high atmospheric pollution
- chronic obstructive pulmonary disease
- congested lungs from heart failure
- recent illness
- certain ages—very young and old

What is the outcome?

At least 85% of healthy people who contract acute bronchitis find it improves spontaneously in about 4–8 days.

Sometimes, especially in those in the risk categories mentioned, the infection can be complicated by bacterial superinfection. These patients may get worse with increasingly severe symptoms and cannot shake off the infection.

What are the risks?

There is no significant risk to the lungs if a healthy non-smoker has a single attack of acute bronchitis. However, it can be serious especially in debilitated people where complications such as persistent bronchitis or pneumonia can develop.

Recurrent episodes are a concern in smokers and those with an existing lung disorder such as pulmonary fibrosis. This is dangerous because it can eventually lead to chronic obstructive pulmonary disease.

What is the treatment?

The issue of prescribing antibiotics

Antibiotics are not needed for acute bronchitis because it is a viral infection which runs a natural course of recovery. Antibiotics are reserved for those patients whose illness may be complicated by a bacterial infection. Your treating doctor will diagnose this on clinical grounds and perhaps the results of a culture of sputum.

General self-help measures

- Rest at home, not necessarily in bed.
- A warm well-ventilated room is best.
- Take aspirin or paracetamol (preferable) for fever or chest discomfort.
- Take any over-the-counter cough medicine that works for you for a non-productive cough (without sputum).
- A heat pack or warm water bottle placed on the chest may relieve discomfort.
- Steam inhalations using a mentholated preparation in very hot water can clear your nasal and bronchial passages.

In some cases your doctor may prescribe a bronchodilator drug administered by aerosol inhalation to relieve any wheezing.

When to seek medical help

- increased shortness of breath
- high fever and chills
- chest pain
- discoloured and/or bloody sputum
- vomiting
- other serious symptoms

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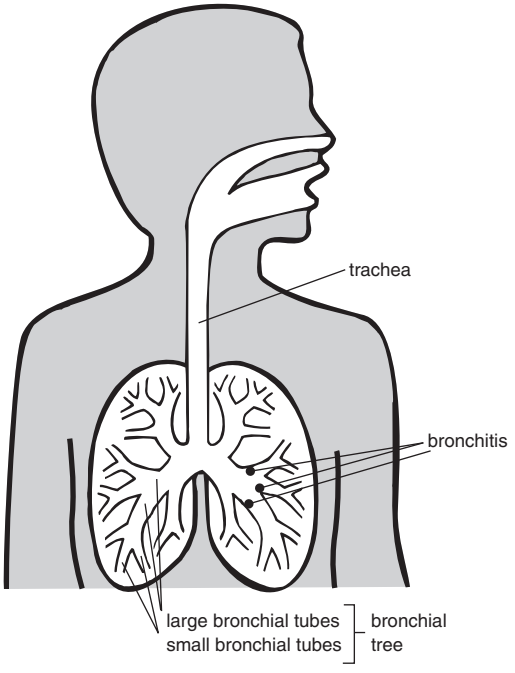
Bronchitis: chronic bronchitis

What is chronic bronchitis?

It is a persisting inflammation of the *bronchial tree* (air passages) of the lungs. It is a potentially dangerous problem because it starts so quietly that many people do not realise that they have it. Repeated irritation thickens and damages the delicate lining of these important tubes. This leads to lots of mucus and thus narrowing of the tubes.



What are the symptoms?

The main symptom is a morning cough with sputum (phlegm). Smokers may consider this to be a normal smoker's cough, but there is nothing normal about it. As time goes by, this productive cough increases.

Later on, wheezing and breathlessness become a problem. If you are breathless when you exert yourself, you probably have significant lung damage.

What are the causes?

Smoking is the main cause.

People who work in dusty atmospheres are also at risk. Air pollution is a minor factor.

At first the bronchitis gets worse with bad colds or influenza, but eventually even a mild cold can bring on a nasty flare-up. Colds or other infections can cause deterioration, especially in winter. However, chronic bronchitis is not caused by chronic infection. It is usually caused by chronic irritation from smoke.

What are the risks?

Once bronchitis is chronic, a vicious cycle is established so that increasing infections and lung damage occur.

The end result is severe permanent lung damage called chronic airways pulmonary disease or emphysema, and then heart failure.

How common is the problem?

In Australia about 4500 people die of chronic bronchitis each year.

What is the treatment?

Self-help

If you smoke, you should stop. This is the vital first step—it will stop further damage. The lungs may return to normal. Avoid smoke-filled rooms.

If you work in a polluted or dusty atmosphere, it would be wise to change your job. A warm, dry climate is preferable to a cold, damp place: it may make you feel more comfortable and may make you less susceptible to winter colds and flu.

Avoid close contact with people with colds, since any viral respiratory infection is a problem to your lungs.

Medical help

Prevention of more infections is important. This may be achieved by giving high doses of vitamin C, anti-influenza injections and antibiotics. Your doctor may prescribe small doses of antibiotics throughout the winter months or may advise you to take a full dose at the first sign of a flare-up. The reason for this is that bacterial infection soon complicates the viral infection.

See your doctor as soon as possible if you notice your sputum changing to a yellow or green colour.

If you have wheezing and breathlessness, an aerosol inhaler will be prescribed if tests show that your breathing capacity is reduced.

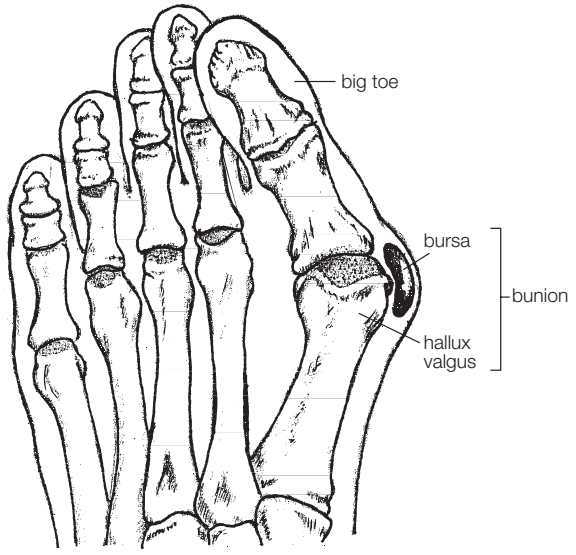
Your doctor can help you with techniques to stop smoking. STOP NOW—before it is too late.

Physiotherapy can help if you have difficulty coughing up sputum.

Bunions

What is a bunion?

A *bunion* is an inflamed *bursa* (small bag of fluid) overlying a V-shaped bony prominence on the outside edge of the joint at the base of the big (first) toe.



What is the cause?

The cause is a common and relatively minor foot disorder of the big toe called *hallux valgus*. 'Hallux' is the medical term for the big toe and 'valgus' means bent or twisted outward. If your big toe has grown or been forced into a position where it overlaps with the second toe, you have hallux valgus. It is angled more than 10 degrees outwards.

Hallux valgus can develop because of one or more of the following:

- a family history of foot abnormalities—an inherited weakness in the toe joints
- arthritis of the big toe joint
- badly fitting footwear—usually narrow, pointed-toed, high-heeled shoes that compress the toes together

What happens to the big toe?

The bony protrusion of the bent big toe is pushed out beyond the normal straight line of the foot and forms the lump that we call a bunion. The outward angled toe can cross over the second and possibly the third toes, causing pressure problems for those toes which may result in a 'hammer' toe of the second toe.

The bunion rubs on the inside of your footwear, causing the overlying skin to become rough and thickened into a callus.

What are the complications?

The persistent pressure especially from a tight shoe on the callus can cause fluid to develop into a small sac which is called a *bursa*. If it becomes red and inflamed it is termed *bursitis*. The bursa may become infected especially in people with diabetes and this is a serious problem. The overlying skin can also break down to form an ulcer.

The affected joint is also more likely to develop osteoarthritis (wear and tear arthritis) sooner than usual. Hallux valgus can cause foot pain and stiffness due to the altered mechanics of the foot.

Corns and calluses are prone to develop at various points of the foot apart from the bunion.

How common is the problem?

Bunions are a very common condition but most people are not troubled by them. They are 3 times more common in women which possibly reflects the footwear problem. They tend to run in families.

Can bunions occur elsewhere?

Yes, a bunion can develop over a similar prominence on the opposite side of the foot—over the little toe. It is rather quaintly called a *bunionette* and is also known as *Tailor's bunion*. A troublesome callus or corn can develop over it.

What is the treatment?

The best treatment is prevention and careful attention to footwear. Hygiene of the foot is important for those with a tendency to hallux valgus.

Self-help for your bunion

- Ensure that your shoes fit very comfortably with ample room for your toes.
- Wear a thick, ring-shaped adhesive pad around and over the bunion.
- At bedtime separate the first toe from the others with a foam rubber pad.
- Arch supports will relieve aching in the forefoot.
- For bursitis, promote healing by cutting a hole in the top of an old shoe and wearing it constantly until the foot heals.
- Daubing affected skin with an antiseptic drying agent such as methylated spirits may be helpful.

Professional help

- A podiatrist will be able to provide expert help including the treatment of associated skin problems.
- Medication is usually unnecessary unless the bursa becomes infected.
- *Surgery*: Operations are reserved for severe cases not responding to careful foot care and the results are excellent. However, it is preferable to treat bunions conservatively and sensibly in order to avoid surgery.

Bursitis and tendonitis of the outer hip

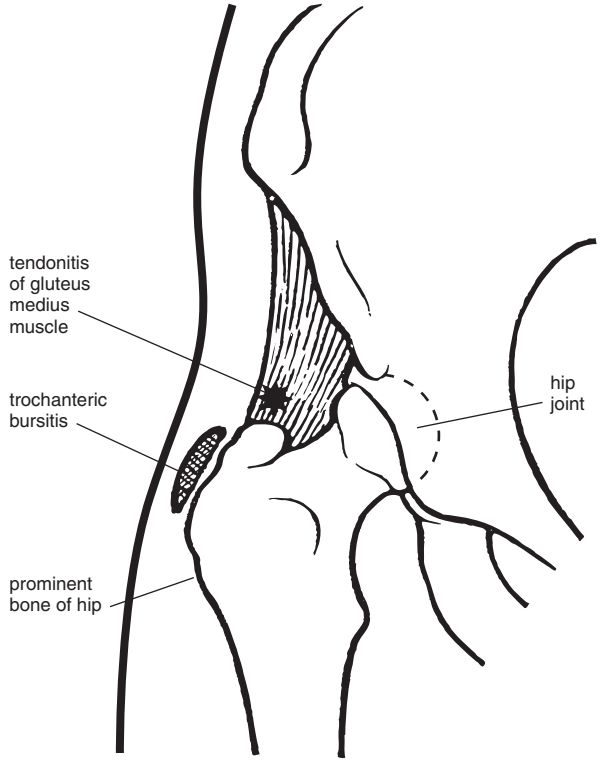
Painful inflammation of the outer hip area at the top of the thigh is a very common cause of disability in middle-aged people. The problem occurs at the *trochanteric* area of the hip—the greater trochanter is the outer bony prominence of the upper thigh. The muscles of the buttock attach to this bone by tendons and there is a protective shock absorber over the bone, called a *bursa*. These areas are prone to inflammation similar to tendonitis and bursitis around the shoulder joint and elbow.

What are trochanteric bursitis and tendonitis?

These are painful localised inflammations of the bursa (*bursitis*) and/or the tendon where it joins the bone (*tendonitis*). It may be difficult for your doctor to tell the difference and, if necessary, special X-rays may be needed to do this. Both conditions may be present at the same time. The problem tends to get misdiagnosed as osteoarthritis of the hip.

Who gets the problem?

Although it can occur in young adults and the elderly, it is a feature of middle-aged women, especially in those who have taken up extra walking, jogging, gardening or a sporting activity such as tennis.



What are the symptoms?

The main symptom is pain on the outside of the hip which can be referred down the outside of the leg as far as the foot. The pain can be very persistent and severe and affects one's lifestyle. A feature of bursitis is pain at night and the patient finds it very painful to lie on the affected side because of the tenderness.

Typical features:

- female older than 45–50 years
- pain on outside of hip referred as far as the foot
- pain on lying on the hip at night
- limp

What is the cause?

The main cause appears to be a friction effect over the bursa area due to excessive walking or similar activity. People with a tendency to walk with intoeing (pigeon toes) are more likely to get bursitis. A common cause is strain on the gluteal muscles of the back, due to the habit of straightening the back after bending it forwards but with the knees kept straight.

What is the treatment?

The first thing to do is stop or reduce the activity causing it, such as sport, long walks and gardening. When walking, it is helpful to use an out-toeing (Charlie Chaplin) type of gait. You should learn to bend your knees before bending your back. Avoid sleeping on the affected side and sleep on a sheekskin rug with a small pillow under the buttock on that side.

The best exercises are knee–chest exercises to stretch the gluteal muscles for up to 10 minutes a day and also stretching the straight leg over the side of a bed (a weight around the ankle helps). For severe persistent pain, an injection of a local anaesthetic mixed with a safe cortisone agent into the tender area is very effective. Very rarely, surgery may be needed to excise the bursa or repair the tendon.

Massage

Firm massage of the outer thigh with an analgesic cream such as Tiger Balm or similar is good. One method is to use an empty bottle such as a 750 mL Coca-Cola bottle filled with water as a rolling pin for about 5–10 minutes each day.

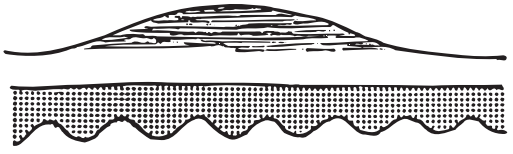
Calluses, corns and warts on feet

Tender skin lumps on the feet are usually caused by *calluses*, *corns* or *warts*. Calluses and corns are areas of skin that have thickened due to constant pressure, while warts are viral infections.

Calluses

What is a callus?

It is simply a thickening of skin caused by some form of repeated pressure and friction. It is usually not painful but can be uncomfortable. It is common on the sole of the foot over the base of the toes. A callus can be found on any part of the body, especially the hands or the knees. When a callus is pared, normal skin is found underneath.



Callus

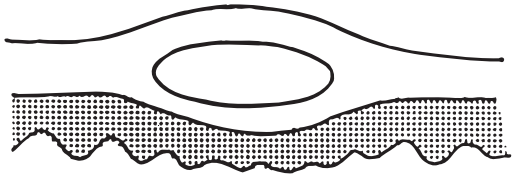
What is the treatment?

- No treatment is necessary if it is painless.
- Proper footwear is necessary to prevent calluses. Choose shoes that are wide enough and have cushioned pads over the balls of the feet.
- Paring with a scalpel blade by your doctor gives relief. (Avoid using razor blades.)
- Filing with callus files or a pumice stone wears away the callus. Soften it by soaking it in water before peeling the skin.

Corns

What is a corn?

A *corn* is a small tender raised lump that is round and has a hard centre. Corns usually form over the toes over the joints, between the toes and on the outside of the little toe. Sometimes they can be very painful. Paring reveals a white circular mass of old skin.



Corn

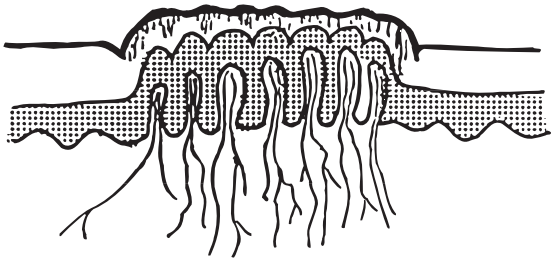
What is the treatment?

- The treatment is similar to that for a callus.
- A corn pad will reduce pressure.
- The corn can be softened with a chemical (salicylic acid) in commercial corn removers and then pared or peeled.
- Remove the source of friction if possible. Wear wide shoes—do not wear poor-fitting shoes. New shoes can be a cause, but your feet may adjust with stretching of the shoes.
- For soft corns between the toes (usually the last toe-web), keep the toe-webs separated with lamb's wool at all times and dust with a foot powder.

Warts

What is a plantar wart?

A *plantar wart* is a wart that has grown on the sole of the foot and then gets pressed into it by pressure. It feels like a stone in the shoe and can be quite painful. It is caused by a viral infection and is more common in children and young people, who may pick the virus up from public showers. When it is pared, small bleeding points are exposed. Plantar warts are more difficult to treat than corns and calluses.



Wart

What is the treatment?

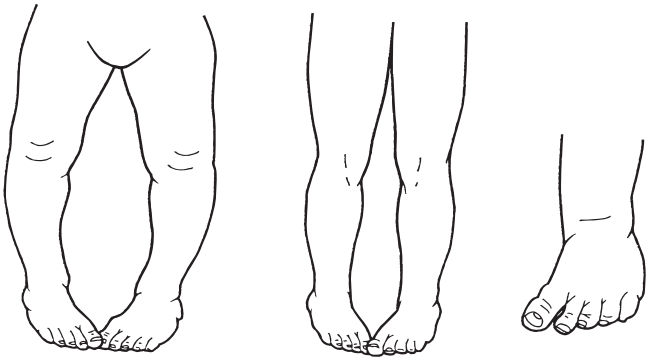
Professional help is usually needed to treat these warts. Many methods can be used, such as freezing with liquid nitrogen, application of chemicals or surgical removal. Special cushions or pads should be worn inside the shoes to relieve pressure.

Intoeing in children

Intoeing is common in children but invariably improves with age. Corrective shoes or inserts do not hasten improvement.

There are 3 different types of causes:

1. *hooked feet:* in infants
2. *tibial torsion:* in toddlers
3. *inset hips:* kindergarten or pre-school children



Internal tibial torsion | *Medial femoral torsion* | *Metatarsus varus*

Hooked foot (metatarsus varus)

Hooked foot is caused by the position of the baby before birth. The foot is turned inwards at the ankle. The sole of the foot is bean shaped. It usually gets better without treatment during the first month. If it is still present after 3 months or so, it should be seen by a specialist who may apply a temporary plaster cast.

Tibial torsion

Tibial torsion is where the main bone (the tibia) of the leg rotates inwards from below the knee. It results when the normal development of rotation is prevented by the child's sleeping posture.

Most legs with tibial torsion get better without treatment. If the legs are not symmetrical (the same on both sides) or the torsion persists for longer than 12 months, the child should be seen by a specialist.

Inset hips (femoral torsion)

With inset hips the femur, which sits in the socket of the hip joint, tends to rotate inwards. The cause is unknown. It is usually most severe when the child is about 5–6 years old and is normal up to 12 years. The children tend to sit in a 'w' position but this is not the cause of inset hips. Fortunately, most children outgrow this condition before the age of 12. If it persists for 8 years after being first noticed, referral to a specialist is necessary.

The 'w' position of femoral torsion (inset hips)

Cancer

What is cancer?

Cancer is an abnormal disorganised growth of cells in the tissues of a person. The cells multiply out of control and drain vital nutrition from the normal cells. A foetus growing in a mother's womb is a rapid growth of cells, but unlike cancer it is beautifully organised. Cancer is often referred to as a *growth*. There are two types of growth: *benign* and *malignant*. The benign type is more organised and not generally dangerous as opposed to malignant growth (cancer), which can spread from its original site to other areas of the body.

Is cancer a single disease?

No. Cancer is a group or class of diseases that share the main feature of uncontrolled cell growth.

What causes cancer?

Although we are able to identify several triggering factors (such as smoking for lung cancer, sunlight for skin cancer, and nuclear radiation for blood and other cancers), we still do not understand the how and why of what causes some cells to become malignant.

Can cancer be inherited?

Yes: although most cancers are not inherited, some families carry inherited genetic mutations for certain cancers, notably breast and ovarian (which are linked), bowel and others on a lesser scale, such as prostate and melanoma.

How lethal is cancer?

Cancer is still a leading cause of death, accounting for about 1 in 8 deaths of people under 35 and 1 in every 4 deaths of those over 45.

What are the common sites of cancer?

- *In men*: skin, lungs, prostate, bowel, kidneys, testes, bladder, stomach, pancreas.
- *In women*: skin, breast, bowel, lungs, reproductive organs, kidneys, bladder, stomach, pancreas.
- The 6 commonest causes of death from cancer in Australia are cancer of the bowel, lung, breast, prostate, lymphoma and pancreas.

What are the main warning signs (common symptoms)?

- unusual bleeding or discharge
- a lump or thickening in the breast or elsewhere
- a sore that does not heal
- a change in bowel or bladder habits
- a persistent hoarseness or coughing
- persistent indigestion or difficulty in swallowing
- loss of weight
- a change in a wart or mole

Do these symptoms or signs always mean cancer?

No, not always, but it is dangerous to ignore them because the earlier the treatment (if cancer is the cause) the greater the chance of recovery. Unusual bleeding should always be treated very seriously. If you have any of these listed symptoms or any trouble that persists longer than a month, see your doctor—to be on the safe side. It probably will not be cancer—but whatever it is should be cured!

Is pain an early sign of cancer?

No, not usually. Pain is usually a very late symptom of cancer, when it has grown into the nerves. People often think that persistent pain such as headache and back pain means cancer, but this is rarely the case. However, pain should not be ignored.

Can cancer be cured?

Once cancer has spread, cures are very exceptional, but many cancers if detected and treated early (before the malignant cells have spread) can usually be completely cured. The cure rate for many cancers is steadily improving, particularly cancer of the cervix, testes, skin, large-bowel, lymph glands (lymphoma) and blood (leukaemia).

What are the methods used to treat cancer?

There are many methods used to treat cancer, including surgery, chemotherapy (special drugs to destroy fast-growing cells), radiotherapy, laser therapy, cryotherapy and hormone therapy. The specialist will choose the most effective treatment for the particular cancer. It is best not to delay treatment while you try 'quack cures', but there is certainly a place for 'whole person' treatment. Some patients find benefit from meditation, good nutrition and vitamin therapy in addition to specialised treatment.

How may cancer be prevented?

Some areas worth considering (based on studies of communities where cancer is rare) are:

- Do not smoke.
- Have a healthy diet including fruit, vegetables, cereal products and fish.
- Avoid exposure to harmful sun. (Use a hat, long sleeves and 'block out' lotion.)
- Be relaxed—avoid stress and anxiety; practise meditation.
- Avoid exposure to radioactivity and asbestos.

Other than this, screening measures for early detection include:

- 2-yearly Pap smears up to the age of 70
- regular mammography for women over 50
- regular breast or testicular self-examination
- bowel examination for those at risk
- regular inspection of the skin

Cannabis (marijuana)

What is cannabis?

Cannabis is a drug that comes from a plant called *Cannabis sativa* or the Indian hemp plant. It contains a chemical called *tetrahydrocannabinol*, which makes people get 'high'. It is commonly called *marijuana*, *grass*, *pot*, *dope*, *hash* or *hashish*. Other slang terms are *Acapulco Gold*, *ganga*, *herb*, *J*, *jay*, *hay*, *joint*, *reefer*, *weed*, *locoweed*, *smoke*, *tea*, *stick*, *Mary Jane* and *Panama Red*. Marijuana comes from the leaves, while hashish is the concentrated form of the resinous substances from the head of the female plant and can be very strong (it comes as a resin or oil).

Is cannabis a new drug?

No. It is a very old drug and was used as a herbal medicine by the Chinese about 5000 years ago.

What are the effects of taking cannabis?

This depends on how much is taken, how it is taken, how often, whether it is used with other drugs and also on the particular person. The effects vary from person to person.

Effects of a small to moderate amount

- feeling of well-being and relaxation
- decreased inhibitions
- woozy, floating feeling
- lethargy and sleepiness
- talkativeness and tendency to laugh a lot
- red nose, gritty eyes and dry mouth
- unusual perception of sounds and colour
- increased appetite
- loss of concentration
- looking 'spaced out' or drunk
- difficulty remembering things
- lack of co-ordination
- delusions and hallucinations (more likely with larger doses)

The effects of smoking marijuana appear in up to 20 minutes and usually last 2–5 hours, followed by drowsiness.

With larger doses, feelings of confusion, restlessness, excitement, anxiety or panic usually develop.

What happens with dependence and long-term use?

'Pot' has a severe effect on personality and drive. People using it lose their energy, initiative and enterprise. They become bored, inert, apathetic and careless. A serious effect of smoking 'pot' is the inability to concentrate and to learn and the loss of memory.

Other serious problems are:

- deterioration of academic or job performance
- respiratory disease, especially bronchitis (more potent than nicotine for lung disease)
- often a prelude to taking hard drugs
- becoming psychotic (resembling schizophrenia)
- impaired ability to drive a car and operate machinery

What are the withdrawal effects?

The withdrawal usually starts 12 hours or so after stopping using cannabis. The effects are usually mild and are over within a few days in most people. It is more severe in habitual users. Some of the withdrawal symptoms are:

- irritability
- nervousness (anxiety)
- feelings of depression
- sleep disturbances
- increased sweating
- tremors
- muscle twitching
- restlessness
- nausea and other gastric disturbances

Does cannabis improve one's sex life?

No—quite the opposite. Although one feels less inhibited, it tends to decrease libido. Long-term use suppresses sex hormones, decreases fertility and may result in impotence and loss of normal sex drive.

What about driving under the influence?

It is unsafe to drive after using cannabis.

Cannabis affects co-ordination and perception, and so it is dangerous to drive a car or ride a motorbike after using it. In an experiment, several people were given 'pot' to smoke and then asked to drive around a test circuit. Most made a mess of their driving, including crashing into posts and retaining walls. It is particularly dangerous when mixed with alcohol. Activities such as surfing, waterskiing and motorbike riding are also dangerous.

What is the management?

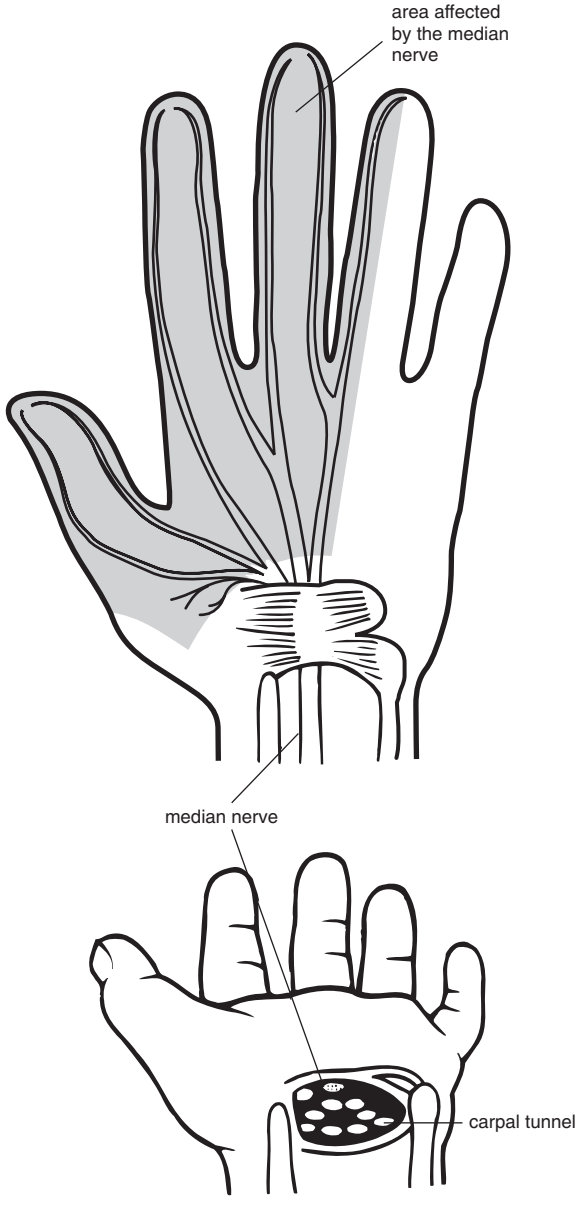
The best treatment is prevention. People should either not use it or limit it to experimentation. If it is used, people should be prepared to 'sleep it off' and not drive.

Carpal tunnel syndrome

What is carpal tunnel syndrome?

It is a painful disorder of the hand caused by pressure on a very large nerve called the *median nerve* as it passes through a 'tunnel' at the wrist.

The tunnel is formed by a tough membrane that makes a 'roof' to a natural arch produced by a group of wrist bones (known as the *carpal bones*). The purpose of this membrane is to keep the many tendons, arteries and nerves that pass under it in place. When it thickens, it causes too much pressure on these structures, especially the sensitive nerve.



Who gets it?

It is quite a common disorder, especially in middle-aged women and in pregnant women. It is thought to be caused by hormone changes causing swelling of the membrane and extra fluid in the tunnel. People doing a lot of hard manual work (such as farmers) seem prone to carpal tunnel syndrome. Sometimes an illness such as rheumatoid arthritis may cause it.

What are the symptoms?

The symptoms are tingling and numbness of most of the hand. The little finger is usually free of symptoms. Pain may shoot up the arm from the wrist. One or both hands may be affected. The pain and tingling is usually worse at night and causes you to wake from a deep sleep. It may be relieved by hanging your hand over the side of the bed and shaking or rubbing it. Warmth seems to aggravate the problem (e.g. under warm bedclothes and washing up in hot water).

What are nerve conduction studies?

Sometimes the diagnosis of median nerve compression is not clear cut, so to confirm the diagnosis scientifically and also test the function of the nerve (especially for damage) a special machine is used to test the nerve.

What are the risks?

It is not a serious problem, but if not treated it can cause permanent weakness and numbness of the thumb and index and middle fingers.

What is the treatment?

Sometimes the problem clears up without treatment, and in some people fluid tablets may help. In pregnant women a splint worn on the wrist at night is helpful, but once the baby is born the problem usually settles of its own accord.

An injection of cortisone into the tunnel can give dramatic relief for quite a long time, especially in people with rheumatoid arthritis.

However, most cases require a small operation to relieve the pressure on the nerve. This is done by cutting through the tough membrane so that more space is created for the nerve in the tunnel. It is a most successful operation, leading to immediate relief of the discomfort.

Chickenpox

What is chickenpox?

Chickenpox (*varicella*) is a mild disease, but is highly contagious and in adults it may result in severe illness. It is caused by a virus that can also cause shingles (herpes zoster). Recovery occurs naturally, because a virus cannot be killed by drugs. Chickenpox affects mainly children under the age of 10.

What are the symptoms?

General

Children are not very sick, but are usually lethargic and have a mild fever. Adults have an influenza-like illness.

The rash

The pocks come out in crops over 3–4 days. At first they resemble red pimples, but in a few hours these form blisters that look like drops of water. The blisters are very fragile and soon burst to leave open sores, which then form a scab and become dry. They can be very itchy.

The site of the rash

The pocks are concentrated on the trunk and head, but spread to the limbs. Do not be alarmed if they appear in or on the mouth, eyes, nose, scalp, vagina or penis.

How infectious is chickenpox?

The disease is very infectious and can spread by droplets from the nose and mouth or by direct contact with the 'raw' pocks. Patients are infectious for 24 hours before the pocks erupt and remain so until all the pocks are covered by scabs and no new ones appear. The incubation period is about 12–21 days, and so the disease appears about 2 weeks after exposure to an infected person. After recovery, lifelong immunity can be expected.

What are the risks?

It is usually a mild illness with complete recovery, but rarely encephalitis and pneumonia occur. Infection of the spots can occur. A severe reaction occurs rarely if aspirin is used in children.

Scarring

Most people worry about this, but usually the spots do *not* scar unless they become infected.

Exclusion from school

Children should be kept at home for 7 days or until all the pocks are dried and covered by scabs. At home it would be sensible to expose other children to the infected person so that the illness can be contracted before adulthood, but take care not to expose people with immune deficiency disorders to the child.

What is the treatment?

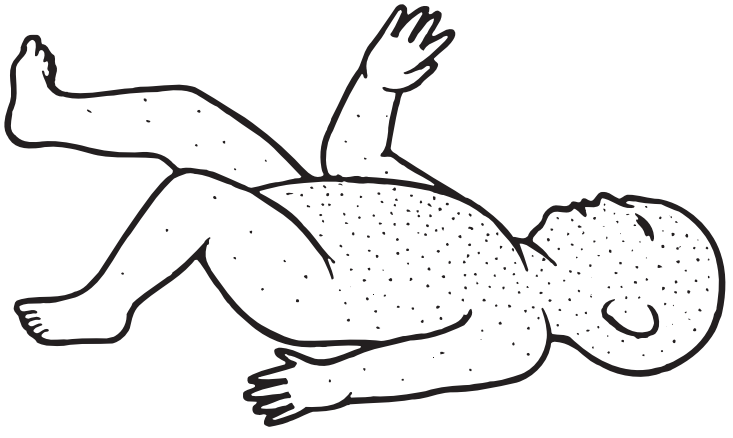
- The patient should rest in bed or move around quietly until feeling well.
- Give paracetamol for the fever. (Avoid giving aspirin to children.)
- Daub calamine or a similar soothing lotion to relieve itching, although the itch is usually not severe.
- Avoid scratching; clean and cut fingernails of children. Put on cotton mittens if necessary.
- Keep the diet simple. Drink ample fluids, including orange juice and lemonade.
- Daily bathing is advisable, with sodium bicarbonate added (half a cup to the bath water) or with Pinetarsol soap. Pat dry with a clean, soft towel; do not rub.
- Antihistamines are sometimes used if itch is severe.

Use of antiviral drugs

These are usually reserved for adolescents and adults with a severe eruption and should be started during the first 3 days of the rash (preferably day 1). In general, they are not used in the very young and in those who are not ill or have very few spots.

Vaccination

A vaccine against chickenpox is now available, and is usually given after 12 months of age in children. Ask your doctor for information.



Typical spread of chickenpox

Child accident prevention in the home

In the kitchen

The most dangerous place for children is in the kitchen—poisons and burns are the dangers. Put all spray cleaners, kerosene, pesticides, rat poison and so on out of children's reach, and keep matches in a childproof cupboard.

Electric jugs with cords dangling down are very dangerous, and a cup of tea is just as hot as boiling water. Never drink anything hot while holding a baby, or pass anything hot over a baby's head or body. Do not allow saucepan handles to stick out into the kitchen from the top of the stove. Do not use tablecloths. Always put hot food and drinks in the centre of the table.

Pre-school children can easily choke on peanuts and small hard foods.

In the bathroom

Poisons and burns are also the main bathroom hazards, but children do drown in baths. Run cold water before hot into children's baths and always test the water temperature before the child gets in. Never leave children unattended in a bath.

Tablets and medicines may be fatal for children: store tablets and medicines in a childproof place and destroy all leftovers. Toilet cleaners and deodorants also should be locked away.

In the playroom

Any object smaller than a 20-cent piece may choke a child: there should be no beads around or small removable parts on toys. Keep jars containing small items such as buttons out of reach. Do not pin dummies to clothing; tie them on instead.

In the bedroom

Remove the plastic cover from a new mattress, remove the bib before the baby goes to sleep, and never leave a baby unattended on the bed or table.

Check children's clothes for fireproof materials and choose the safest garments. Select close-fitting clothes; ski pyjamas are safer than nighties; tracksuits are safer than dressing gowns.

In the yard

Insecticides, weed-killers, fuels, paints, paint strippers and all garden products should be labelled and stored away from children. They should never be stored in old drink bottles. Children will crawl and fall over veranda edges and steps unless they are fenced off.

Short stakes in the garden should be removed, and keep children inside while mowing the lawn. Do not leave ladders around.

In the pool

Five centimetres of water in a pool can drown a toddler. A pool not in use should be made safe from wandering children—at least covered and preferably fenced off—and children should swim only with adult supervision. Keep pool chemicals, especially acid, locked away.

In the car and on the road

Place your child in the car first, and then walk right around the car before reversing down the drive. All children should be placed in approved child restraints, even to be driven just around the corner.

Train your children to sit in the back on the passenger side so that they get out on the kerb.

In general

Floor-to-ceiling glass doors and windows should have two stickers on them (one at your eye level, the other at toddler eye level) to prevent people walking through.

False plugs should be inserted into all power points that are not in use, especially those within toddlers' reach.

Bar radiators and children do not mix. Any type of fire should have a guard around it.

Remember

- Prevention is so much better than cure.
- When you are upset about something it is easy to forget about your child for a moment, so be doubly careful when you are having an 'off day'. Prepare your house now, and good habits will save lives and prevent tragedy later.
- Buy a bottle of syrup of ipecac and write your doctor's telephone number beside your telephone for rapid action should your child swallow something dangerous. Know the local Poisons Information Centre telephone number.
- Your friends' and relatives' homes may not be as safe as yours.

Chlamydia urethritis

What is chlamydia?

Chlamydia is a type of bacteria and one of its varieties, *Chlamydia trachomatis*, is the most common sexually transmissible infection (STI) in the world. It is 3 times more common than gonorrhoea.

What are the symptoms?

The symptoms usually appear about 2–3 weeks after intercourse, although the incubation period can be as long as 12 weeks and as short as 5–10 days.

In men

The main symptoms (if present) are:

- a burning sensation when passing urine
- a discharge (clear, white or yellow) from the penis

Sometimes there is no discharge, just pain. Most often the symptoms are trivial. About 40% of men with chlamydia may have no symptoms.

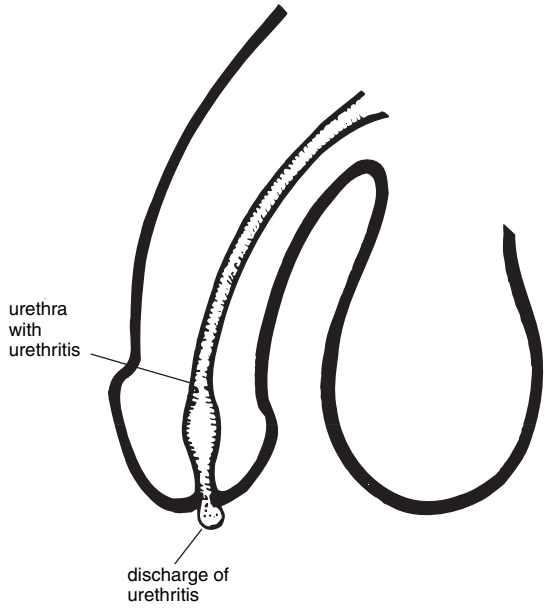
The first noticeable symptom is a slight tingling or burning at the tip of the penis, usually first thing in the morning. The pain sometimes becomes quite severe. The discharge soon follows. It is usually clear at first, but if untreated can become heavier and yellowish. The infection can spread to the prostate gland and testicles.

In some, the only symptoms are spots on the underpants or dampness under the foreskin.

In women

In women, chlamydia urethritis usually causes no symptoms at all (this applies to about 70%) but may cause vaginal discharge. Some may notice burning on urination.

If untreated, as is often the case, it can infect the Fallopian tubes. This is the commonest form of pelvic inflammatory disease, which can result in infertility.



Chlamydia urethritis in males

How is it diagnosed?

Chlamydia is diagnosed by taking special swabs from the affected areas: from the urethra of the male penis and the cervix and urethra in females.

A new and easier method for the patient is to perform special tests on the first voided specimen of urine.

How is chlamydia caught and spread?

It is transmitted from one person to another during sexual intercourse. Men can pick it up through vaginal sex (often the woman carries the infection without knowing) or, less commonly, through anal or oral sex with either sex.

How is chlamydia urethritis treated?

Chlamydia urethritis is treated with a course of antibiotics, usually azithromycin as a single dose or tetracycline or doxycycline for 10 days. It usually responds very well to treatment, but can be slow to respond in some people and may recur in some others. About 1 in 5 patients will need more than 1 course.

It is the male who usually notices symptoms and comes for treatment. However, it is important that the sexual partner or partners are tested even if they have no symptoms. Sexual intercourse must be avoided until the infection is cleared up in both partners.

How is chlamydia prevented?

Using condoms for vaginal or anal sex provides some protection and should be used with any new partner.

Important points

- Chlamydia is a common STI.
- It sometimes causes symptoms in men.
- There may be no symptoms in women.
- It can cause infertility in women (and less commonly in men).
- It is readily treated by antibiotics.
- Treatment may be by a single dose only but may need repeat courses.
- All sexual partners need to be treated.
- Do not have sex until the infection is cleared (both partners).
- It is the affected person's responsibility to inform their partner(s) that they have chlamydia.
- Condoms provide some protection.

Cholesterol: how to lower cholesterol

Why bother?

Heart disease is the number one killer in Australia. It is mainly caused by clogging up of the arteries by a fatty substance known as *atheroma*, which comes from having too much 'fat' in the blood. This serious process is called *atherosclerosis*—the condition that can lead to heart attack or stroke. There are two types of fat that cause damage if their levels are too high—*cholesterol* and *triglyceride*. A special blood test taken after fasting for at least 12 hours can tell if one or both of these fats are too high.

Triglyceride

If your triglyceride level is too high, fixing the problem is usually quite straightforward because it is mainly due to being overweight. It is caused by having too many calories in the diet, especially from sugar and other carbohydrates and high-calorie drinks (e.g. soft drinks and alcohol, in particular beer). The aim is to get your weight down to an ideal level.

Cholesterol

High cholesterol is a bigger problem, and if your level is too high it is important to reduce it. Cholesterol is a white fatty substance made mainly in the liver by animals, including humans. We get high levels mainly through our diet, by eating saturated fats especially from animal foods. (Therefore it is a rare problem in vegetarians.) Most people can lower the level through changing their diet. Occasionally the level is so high in some people that, in addition to the diet, special medicine is necessary to reduce it to the right level. The prescribed drugs are very effective.

Note: Although cholesterol is present in animal food, it has been shown that it is necessary to reduce the amount of *all* the saturated fats (plant and animal) in our diet and to lose excess weight in order to get our cholesterol down. Foods rich in starch (such as bread, rice and pasta) and foods rich in starch and fibre, known as complex carbohydrates, also help.

Golden rules

- Keep to your ideal weight.
- Take a high-fibre diet.
- Eat fish at least twice a week.
- Beware of 'fast' foods.
- Avoid deep-fried foods.
- Take regular exercise.
- Always trim fat off meat.
- Avoid biscuits between meals.
- Drink more water.
- Do not smoke.
- Limit alcohol intake.

The low cholesterol diet

	Foods to avoid	Suitable foods
Eggs	whole eggs, egg yolks	egg whites
Milk	whole milk and its products—butter, cream, cheese, ice-cream, yoghurt, condensed milk	low-fat milk, skim milk and its products—cottage and ricotta cheese, buttermilk, non-fat yoghurt
Organ meats	brains, liver, paté, liverwurst, kidney, sweetbread	—
Seafood	prawns, squid (calamari), fish roe, caviar, fish 'fingers', canned fish in oil (e.g. sardines)	fresh fish, scallops, oysters, canned fish in water, lobster and crab (small amounts)
Meat	fatty meats—bacon, ham, sausages, salami, canned meats, pressed meats, meat pastes, hamburger mince	rabbit, veal (without fat), lean cuts of beef, lamb and pork (in moderation)
Poultry	duck, goose, skin of chicken and turkey, pressed chicken	chicken, turkey (lean and without skin), preferably free-range
Bakery food	pies, pasties, pastries, cakes, doughnuts, biscuits	bread, crumpets (especially wholemeal), crispbreads, water-biscuits, homemade items (pies, etc.) if proper ingredients used
Fast food	fried chicken, chips, fish, dim sims, spring rolls, etc., hot-dogs, pizzas, fried rice	—
Nuts	cashews, macadamia nuts, coconut, roasted nuts, brazil nuts, peanuts, peanut butter (can have in very small amounts)	pecan nuts, hazelnuts, walnuts, almonds, seeds (in moderation)
Fruit and vegetables	—	all types (very important)
Miscellaneous	gravies, potato crisps, caramel, chocolate (including carob), butterscotch, 'health food' bars, fudge, coffee whitener and other cream substitutes, toasted breakfast cereals (especially with coconut)	rice, pasta, cereals, jelly, herbs, spices, canned spaghetti, Vegemite, tea, coffee, honey, jam, alcohol (small amounts)
Oils and fats	saturated fats—lard, dripping, suet, copha, cooking (hard) margarine, coconut and palm oils, mayonnaise	polyunsaturated fats—margarines, salad dressings; vegetable oils—olive, walnut, corn, soya bean, sunflower, safflower, cottonseed (all in moderation)
Cooking methods	frying, roasting in fat	using vegetable oils (as above), baking, boiling, grilling, stewing

Chronic fatigue syndrome

What is chronic fatigue syndrome (CFS)?

CFS is a feeling of chronic fatigue that persists or keeps recurring for longer than 6 months and is associated with several other problems, including a reduction in physical activity by at least 50%. Organic disease or psychiatric causes are absent.

What are the symptoms of CFS?

Four or more of these symptoms can be present:

- extreme exhaustion (with little physical effort)
- headache or a vague 'fuzzy' feeling in the head
- aching in the muscles and legs, especially after exercise
- an emotional 'roller-coaster'
- poor concentration
- memory problems
- sleep problems, especially excessive sleeping
- feeling tired on waking
- feelings of depression
- feeling very flat and unwell after exertion
- aching in the joints
- sore throat
- palpitations
- feeling feverish (although temperature normal)
- swollen glands in neck
- various other symptoms, e.g. ringing in the ears

Does CFS have other names?

Yes; CFS is also known by several other names including *myalgic encephalomyelitis* (*ME*), *postviral syndrome*, *yuppie flu*, *chronic Epstein-Barr viral syndrome*, *Icelandic disease*, *Royal Free disease*, *Tapanui disease* and *Raggedy Ann syndrome*.

What is the cause?

So far the cause is unknown. We do know that about 2 out of 3 patients have a viral flu-like illness beforehand. No single virus has yet been identified. It is similar to the chronic fatigue that can follow glandular fever. In other patients CFS simply develops out of the blue and the body's immune system responds but in an abnormal way.

Who gets CFS?

The onset usually occurs between the ages of 20 and 40 years, but it can affect people of any age, social status and occupation.

What do the tests show?

All tests will be normal. (There is no single test for CFS available, but a special urine test is being developed.) The main reason that you have tests is to make sure that you do not have an organic cause such as anaemia.

What is the usual outcome and what are the risks?

CFS usually gets better with a slow, steady improvement, but relapses can occur on and off for some time. There are usually no complications and the main concerns are feelings of anger, frustration and depression.

What is the management?

There is no magic drug treatment, so the management is mainly support and care. It is important to be reassured that CFS is usually a self-limiting problem. In some cases it can clear up in 2 years but in others it can last for 10 or more years. The patient is the major carer of his or her body and must 'listen' to it and work out a day-to-day plan of what to do, in conjunction with the doctor. It is important not to get onto a merry-go-round of visiting many practitioners.

Self-help guidelines

- Rest seems to be the best way to cope, although it does not cure it.
- Take pain-killers such as aspirin for aches and pains.
- Pace yourself—don't overdo it, and rest when you can.
- Avoid things such as stress that aggravate the fatigue.
- Avoid long-distance travel if possible.
- Good supportive relationships are important.
- Attend a local support group.
- Undertake a realistic, regular, graduated exercise program.
- Join a meditation class and practise it at home.

Drug treatment

Drugs are generally not helpful, and using them is based on a 'wait and see' trial. Some patients respond to certain drugs such as antidepressants, evening primrose oil or vitamin B12 injections, while others do not seem to get any benefit. Your doctor will guide you.

Chronic obstructive pulmonary disease

What is chronic obstructive pulmonary disease (COPD)?

COPD is a slowly progressive disorder of the lungs in which the flow of air through the airways is obstructed. This obstruction may or may not be relieved to a certain extent by medications such as bronchodilators. Other terms used to describe it are *chronic obstructive airways disease* (*COAD*) and *emphysema*. However, emphysema is the extreme variation in which the healthy elastic sponge-like tissue at the end of the bronchial tubes is damaged and does not squeeze the air in and out properly.

What is the cause of COPD?

COPD is almost always caused by cigarette smoking, and patients with COPD have usually been smokers of 20 cigarettes per day for 20 years or more before the problem develops. The cigarette smoking leads to *chronic bronchitis* which is a persisting inflammation of the bronchial tree (air passages) of the lungs. This repeated irritation may thicken and damage the delicate lining of these air passages, resulting in the secretion of excessive mucus and eventual narrowing of these tubes.

There are other irritating things that aggravate COPD although not as severe as smoking. These include irritants from industrial fumes and dusts.

How do cigarettes affect the lungs?

When cigarette smoke is inhaled 80–90% remains in the lungs and causes irritation, increased mucus production and damage to the deep parts of the lungs. Eventually mucus and tar clog up the air tubes, causing chronic bronchitis and COPD. If you continue to smoke, the problem will get worse. If you stop, the disease may stay steady and may even improve.

What are the symptoms?

COPD usually produces few symptoms in the early stages and they tend to be ignored.

The main symptom is a morning cough with sputum (phlegm) and shortness of breath with exertion which steadily gets worse. Smokers may consider the cough to be a normal smoker's cough, but there is nothing normal about it.

Other symptoms include wheezing, tiredness, weakness and difficulty clearing the chest.

What are the risks of COPD?

Patients are prone to chest infection which continues the vicious cycle of lung disease. Such infections can lead to pneumonia.

As COPD gets worse it can cause heart failure and respiratory failure (where the lungs get worse). Psychological complications include anxiety, panic and depression.

What is the treatment?

Self-help

- If you smoke you must stop.
- Avoid places with polluted air and other irritants such as smoke, paint fumes and fine dust.
- Go for walks in clean fresh air. (Keeping physically active is good for the lungs and heart.)
- Get adequate rest.
- Avoid contact with people who have colds and flu.

> The only treatment proven to slow down the relentless progression of COPD is smoking cessation.

Medical help

- Visit your doctor regularly for check-ups and if you get a chest infection.
- Oxygen may be needed if your problem is severe—home oxygen units are available.
- Visit your doctor without delay if you get a cold or bronchitis, or start coughing up sputum.
- If you have a chest infection antibiotics will help clear it up.

Bronchodilators

- If your chest is tight or wheezy, inhalation of a bronchodilator should help.
- Many patients respond well enough to get sufficient short-term relief.
- New agents delivered by inhalation may give improved results.

Corticosteroids

Some patients may benefit from a course of inhaled or oral corticosteroids and doctors may undertake a trial of this therapy.

Prevention for all patients

- influenza injection every year in autumn
- pneumococcal vaccination every 4 years
- if you still smoke QUIT

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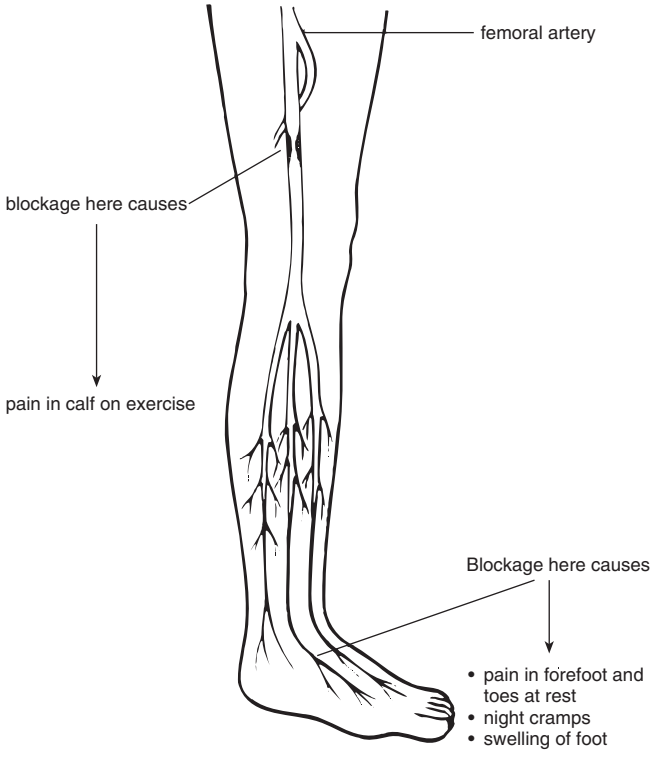
Circulation to legs: poor circulation

Poor circulation to the legs (known as *peripheral vascular disease*) is caused usually by *atherosclerosis* (hardening of the arteries). It is quite common in older people, and the likelihood of it occurring increases with age. It is known to be caused by smoking, high blood cholesterol, high blood pressure and diabetes.



What are the symptoms?

Pain in the calves and other muscles

The reduced blood flow to the legs can cause pain, usually in the calves but also in the buttocks and thighs. The pain is a cramping or ache felt only when the legs are active, such as when walking a long distance or running, and it disappears soon after rest. The cramping pain is caused by a lack of oxygen, which is carried to the muscles in the blood.

Pain in the foot

Some patients feel pain in the foot, especially the toes, forefoot and heels. Unlike pain in the muscles, it affects the skin and comes on at rest. It is generally worse in bed at night, is constant and hard to relieve.

Other symptoms

Other symptoms or signs include loss of normal hair on the legs, shiny skin, nail changes, coldness of the feet and discolouration of the foot (such as red, white or blue).

What aggravates the problem?

Certain drugs, such as beta-blockers (used to treat high blood pressure), smoking and anaemia aggravate this condition.

What are the risks?

The legs are subject to thrombosis, infections, wounds that do not heal (may develop into ulcers) and gangrene.

What tests are done?

There are special investigations to measure the blood flow to your legs. If surgery is being considered, an X-ray of the arteries will be arranged.

What can be done?

The most important thing to do is change your lifestyle so that the problem does not get worse. If you smoke, you must stop. If you are overweight, reduce your weight to ideal weight and have a healthy diet. A high blood cholesterol requires treatment. Regular moderate exercise is recommended. Try to keep your legs warm and dry. If you have rest pain in the feet, sleep with your legs dangling over the edge of the bed.

What are the special precautions?

Care of your feet is important, especially care of the toenails. When cutting toenails, avoid cutting the flesh; any wound is likely to get infected. It is advisable to have a podiatrist (chiropodist) care for your feet. Avoid injury to the legs and feet. Any simple wound is likely to break down and form an ulcer, which can take months to heal. Consult your doctor if you have any problems, especially an unusual change in the colour of your feet or a sudden onset of pain.

Circumcision

Who gets circumcised?

Circumcision is performed on baby boys for a number of reasons, but mainly because it is demanded or requested by their parents, often for religious or cultural reasons. It is a routine ritual in some religions or cultures, but in other societies parents tend to be uncertain about the decision to circumcise and may worry a lot about it. Some parents want the operation so that the child can be just like his father. In older boys and some adults, circumcision may be necessary for medical reasons, but this is quite uncommon. Some people argue that it protects against the spread of HIV and other sexually transmitted diseases.

Why are doctors generally against circumcision?

As a rule doctors advise against routine circumcision, mainly because it is unnecessary on medical grounds and any unnecessary operations should be avoided. Any operation carries a risk of complications and some, such as bleeding, can occur during circumcision. The foreskin has a protective function for the delicate glans (tip) of the penis, and many doctors see this as an important feature of the natural order of the human body.

When can the foreskin be fully pulled back?

The foreskin of all newborn babies is tight. As time goes by the foreskin frees up so that by the age of 5 years it can usually be fully retracted. It is not worth trying too hard before this age. When it is pulled back, it is advisable to gently wash away the cheesy material that has built up. If it is not possible to fully pull back the foreskin by the age of 10, it is worthwhile consulting your doctor. As a rule the foreskin should only be retracted by its owner!

Who needs circumcision?

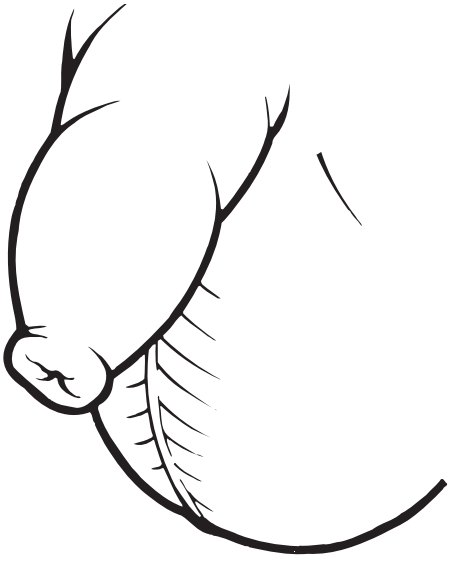
In some boys the foreskin may be very tight (this is called *phimosis*) and prone to infection. Sometimes an infection can cause the skin to become too tight. This leads to a very small opening, which can cause problems when passing urine (e.g. dribbling or spraying). Redness and discharge as well as pus when passing urine indicate infection. This may well mean that circumcision will be necessary. However, one or two attacks do not mean circumcision is essential. Rarely the foreskin cannot be pulled back easily (and may get stuck) in some older boys, and this may be a reason for circumcision.

The decision to circumcise

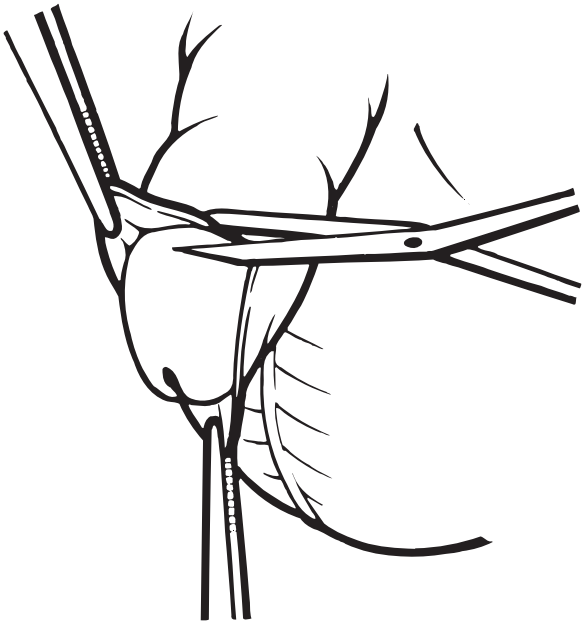
It is important to weigh up the pros and cons for circumcision and then discuss it with your doctor. Doctors usually advise against operating on newborn babies and point out that there is no hurry to operate because it is best performed when the baby is not wearing nappies.

Key points

- Routine circumcision is not recommended.
- It is best avoided on newborn babies.
- It should be considered when there is:
  — very tight foreskin
  — recurring infection of the foreskin
  — difficulty in passing urine
  — foreskin that cannot be pulled back easily.



Tight foreskin

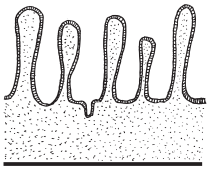


Method of circumcision

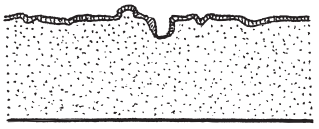
Coeliac disease

What is coeliac disease?

It is a hereditary disorder of the small intestine caused by a sensitivity to gluten in food. Normally the lining of the small intestine has a fluffy velvety texture but with coeliac disease it becomes smooth and flat. This reduces its ability to absorb nutrients including sugars, proteins, vital minerals and vitamins from food. The intestine simply cannot tolerate gluten in food. The exact reason is unknown. The condition is also called *gluten enteropathy* and *non-tropical sprue*.



Appearance of lining of normal intestine



Appearance in coeliac disease

What is gluten?

Gluten is a type of protein present in most grains, especially in wheat and rye and also in barley and oats. It is present in most of our breakfast cereals.

Who gets the disorder?

Coeliac disease is a relatively common condition that seems to affect mainly people of Celtic origin. Children usually develop it between 6 and 18 months of age. However, the onset of the disorder can be delayed and it can occur at any age. The symptoms can come on slowly, perhaps over years, making early diagnosis difficult.

What are the symptoms?

In some people there are no symptoms and when present they vary from one person to another.

In children

Symptoms commence within a few weeks of cereals being started in the baby's diet. These include:

- failure to gain weight (or even lose weight)
- poor appetite
- diarrhoea
- loose, pale, bulky, bad-smelling faeces
- passing a lot of wind
- swollen, maybe painful abdomen
- mouth ulcers
- nausea and vomiting

In adults

Common symptoms include:

- tiredness and lack of energy (may be anaemia)
- weight loss
- diarrhoea
- bulky, offensive faeces
- faeces difficult to flush down toilet
- flatulence and abdominal swelling
- anorexia and nausea

What are the risks?

Generally it is not a serious disorder when diagnosed early but otherwise can have serious consequences. Children can have stunted growth (which can be permanent) if not treated and have an increased risk of infection. Both adults and children can get anaemia due to the poor absorption of nutrients.

How is it diagnosed?

Special blood tests can give a strong clue to the diagnosis. However, the key test is a biopsy of the lining of the small intestine, which is done under sedation. This shows the flat lining of the intestine.

What is the treatment?

The treatment is by a special diet which is needed for the person's lifetime. It excludes gluten—no wheat, barley, rye and oats. This allows the bowel lining to recover. In children the response can be dramatic. Avoid foods that are obvious, e.g. bread, flour and oatmeal, or those that are more subtle, e.g. dessert mixes, stock cubes, gravies, ice-creams, many processed foods and confectionery. Otherwise, have a diet high in complex carbohydrate and protein and low in fat.

Forbidden foods

- standard bread, pasta, crispbreads, flour
- standard biscuits and cakes
- breakfast cereals made with wheat or oats
- 'battered' or bread-crumbed fish, chicken, etc.
- meat and fruit pies
- most stock cubes and gravy mixes

A gluten-free diet is not necessarily dull. Supermarkets now sell many tasty products including special bread and biscuits made from gluten-free flour. These are labelled 'gluten free'. Breakfast cereals containing rice and maize (corn) can be eaten.

Any iron and vitamin deficiency should be corrected with tablets—ask your doctor.

Other considerations

There is no restriction to general activities. It is useful to contact a coeliac disease support organisation such as the Coeliac Society in your state.

Common cold

What is the common cold?

The *common cold* is an infection of the upper respiratory passages, especially the nose and throat. It is caused by any of several types of viruses. It is quite different from influenza (the flu), which is caused by more intense viruses.

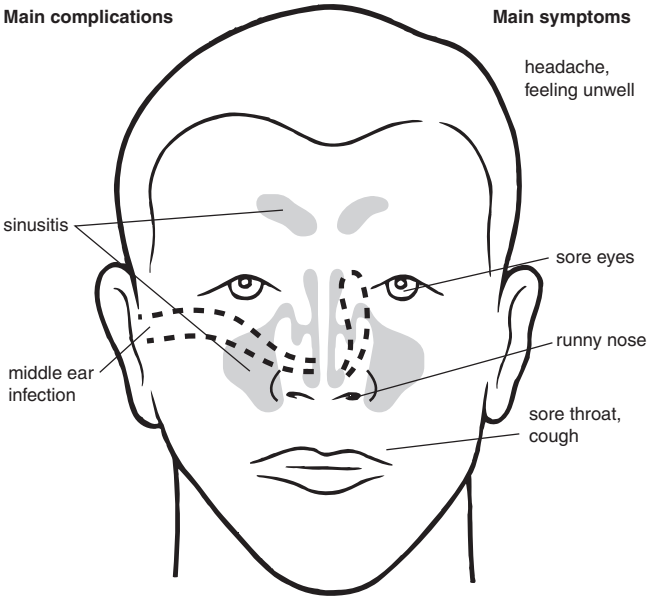
What are the symptoms?

The usual symptoms are:

- runny nose
- sore throat
- sneezing
- sore eyes
- feeling generally unwell
- slight fever

Other possible symptoms are:

- headaches
- hoarseness
- high fever, with general aches and pains
- coughing



The main symptoms and complications of the common cold

How is it caught?

If you have a cold, you must have breathed in the virus, which is carried in the air after being coughed or sneezed out by another person with a cold.

What is the treatment?

There is no cure for the common cold. Antibiotics are of no use for viral infections and are only useful for certain complications. Fortunately, the body's immune system eventually is able to fight the virus by making antibodies. This takes several days. There are several things you can do to feel more comfortable, and to help your body's immune system:

- Rest. It is important to have plenty of sleep and rest when you have a cold. Physical activity puts extra demands on the immune system.
- Analgesics such as paracetamol and aspirin have several useful effects: they control fever and inflammation, and they are effective pain-killers. The adult dose of paracetamol or aspirin is 2 tablets every 4 hours (up to a *maximum* of 8 per day).
- A blocked nose can be considerably helped by inhaling steam. One way is to put boiled water into a basin with menthol or friar's balsam, then put a towel over your head and breathe the steam in through your nose and out through your mouth.
- Usually, coughing is to clear away unwanted material. If you have a dry cough, however, and it is very distressing, you may suppress it with a cough mixture. Ask your pharmacist or doctor about this.
- Gargling aspirin in water or lemon juice can soothe a sore throat.
- Some people claim that taking large doses of vitamin C helps them recover more quickly from a cold. An average dose is 1–2 grams a day.

Your cold can be cleared up in a few days, but can last up to 10 days. Sometimes you can get a bacterial complication, which may require antibiotics. However, as a rule antibiotics are not prescribed because they are not necessary. Viruses are not destroyed by the commonly prescribed antibiotics and there is no evidence that giving them leads to a quicker recovery. If you get any of the following, you should see the doctor:

- a sore ear
- chest pain or difficulty in breathing
- a lot of green mucus from your chest or nose
- a sore throat without other symptoms

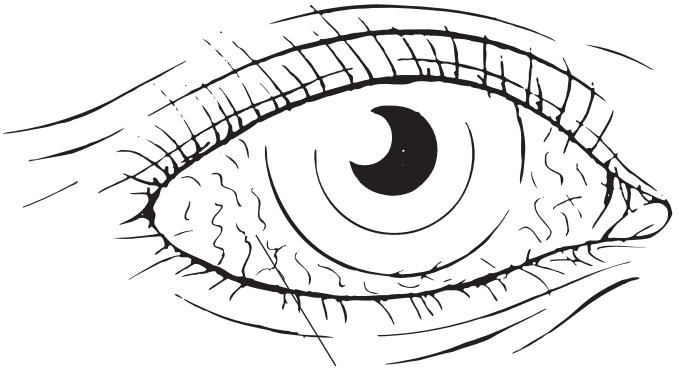
How can it be prevented?

It is important to consider whether you have a reason for this cold. Regular exercise, a balanced diet and adequate sleep are important to keep your immune system in tiptop shape.

Conjunctivitis

What is conjunctivitis?

It is an inflammation of the *conjunctiva*, which is a thin, clear tissue that lines the eyelids and the eyeball, except the cornea. It is very common, but not a serious problem except in newborn infants.



red, tender blood vessels of the conjunctiva

What causes conjunctivitis?

- bacterial infection
- viral infection
- allergies such as hay fever

Bacterial infections are common; the bugs are usually picked up from contaminated fingers, face cloths and towels. They are more likely to occur when you are run down, such as with a heavy cold, and when the tear ducts are blocked with a respiratory infection.

What are the symptoms?

Bacterial infection (usually both eyes)

- whites of the eyes red and sore
- yellow pus discharging from the eyes, making them sticky
- during sleep, this matter causes the eyelids to stick together so that they have to be prised open upon waking

Viral infection

- a painful red eye
- slight discharge only

Viral conjunctivitis, which is also associated with upper respiratory infections, is the conjunctivitis that usually occurs in epidemics (known as 'pink eye'). It usually lasts 2–3 weeks and can be very contagious, so care needs to be taken not to infect others.

Allergic conjunctivitis

- itchiness and redness of the whites of the eyes
- a gritty feeling in the eyes
- no discharge

A feeling of irritation and watering may be found with all these types.

What is the treatment?

It is important to visit your doctor for care. Sometimes the cause is a foreign body, such as a piece of metal or a piece of an insect or another speck that has entered your eye without your being aware of it.

Your doctor may prescribe antibiotic or antiallergy drops or ointment, which you place in the eye as directed. The infection usually responds rapidly to treatment within 48 hours. If not, inform your doctor.

Other points

- Avoid touching your eyes directly.
- Wash your hands regularly.
- Do not use make-up.
- Gently wipe any discharge with disposable tissues.

Eye bathing with salt water

Antibiotics will not work if there is discharge still in your eyes, and so it is vital to wash away this debris with a weak, salty solution. It is preferable to have this warm. The solution can be made by dissolving 1 teaspoon of salt in half a litre (500 mL) of boiled water. Use this solution before instilling eye drops.

Another method is to add a pinch of salt to an eyebath of lukewarm water. Apply the eyebath closely to the rim of the eye, look upwards and blink the eye, which will then be irrigated by the solution.

Sometimes bathing the eye with saline or a weak solution of povidone-iodine (Betadine) diluted 1 in 10 with saline or water will clear the eye infection.

Constipation

What is constipation?

Constipation is:

- hard, often very small stools
- infrequent bowel movements
  or
- a feeling of unsatisfied emptying of the bowel

What are the causes?

It is mainly caused by simple things such as:

- neglecting the habit of attending the toilet
- not responding to 'nature's call'
- overuse of laxatives
- overuse of pain-killers
- a poor diet with a lack of fibre
- lack of exercise
- insufficient fluid intake

Apart from slack habits, there are other important causes such as bowel cancer, drugs, thyroid disease, depression, anorexia nervosa and lead poisoning. Any medicine that you are taking should be suspected of causing constipation.

What are the risks?

Constipation can cause a lot of discomfort in the stomach and rectum and may cause blockage of the bowel. It can lead to problems of the anus such as piles and itchiness, and to hernias.

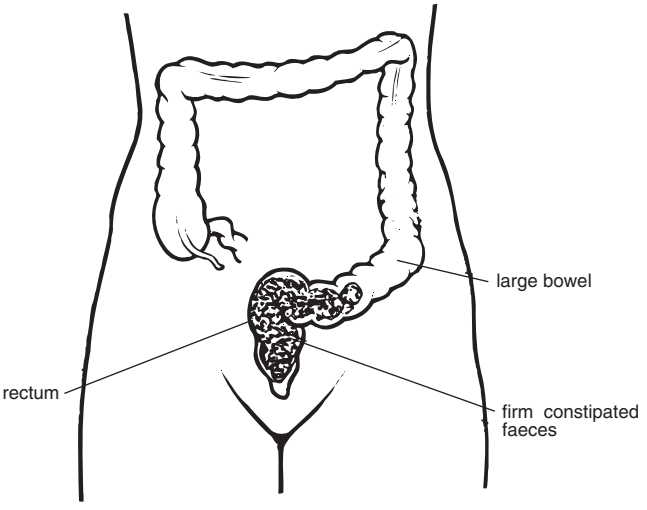
Very important points

- If an obvious change occurs in your bowel habit, consult your doctor for advice.
- Bowel regularity can vary from person to person. Some people believe that just as the earth rotates on its axis once a day, so too should their bowels open daily to ensure good health. This may be ideal, but it can be normal to 'go' every second day or even twice a week.

Useful hints to avoid constipation

Activity

Adequate exercise, especially walking, is important.



Diet

Take plenty of fluids, especially water and fruit juices. Eat foods that provide bulk and roughage, for example vegetables and salads, cereals (especially bran), fresh and dried fruits, and wholemeal bread. Some examples of food with good bulk (from least to most) are potatoes, bananas, cauliflower, peas, cabbage, lettuce, apples, carrots and bran. Fruit has good fibre, especially in the skin, and some have natural laxatives (e.g. prunes, figs, rhubarb, apricots).

Habit

Answer nature's call to empty your bowels as soon as possible. Develop the after-breakfast habit. Allow time for a good relaxed breakfast and then sit on the toilet (up to 10 minutes if necessary) while reading! Eat meals slowly in a relaxed manner at regular times.

Laxatives

Avoid laxatives, codeine compounds (tablets or mixture) and neglecting the call of nature.

Many laxatives can actually aggravate the problem in the long run and should be avoided. If absolutely necessary, your doctor may recommend one of the hydrophilic bulk-forming agents such as isphagula and psyllium.

Contact dermatitis

What is contact dermatitis?

It is a skin inflammation caused by an allergic or irritating reaction to certain substances coming into contact with the skin. The reaction can be *acute* (sudden), within minutes to hours, or *chronic*, which comes on slowly (such as the reaction to the nickel in a watchband).

What are the symptoms?

- redness of the skin
- itchiness
- bright red weeping areas or blisters (if severe)

The dermatitis can actually range from a faint redness to 'watermelon' swelling of the face.

The diagnosis for the offending agent is confirmed by patch testing.

What areas are usually affected?

- the face, especially around the eyes
- the genital area
- the hands and feet

What substances commonly cause dermatitis?

Irritants

- acids and alkalis
- detergents or soaps
- sprays
- solvents or oils

Allergens

- plants (e.g. rhus, grevillea, primula, poison ivy, mango skin, parsnips)
- chemicals in some perfumes and cosmetics
- some metals in jewellery, especially nickel (e.g. nickel buttons or studs); chromate (in cement and leather)
- rubber and latex
- some topical medications (e.g. antibiotics, anaesthetics, antihistamines)
- resins and glue
- dyes
- coral

What is occupational dermatitis?

Occupational dermatitis is a very common form of contact dermatitis. It is caused by a whole range of irritants and allergens used in industry that come into contact with the skin of workers. Most problems occur on the hands.

What is housewife's dermatitis?

This is a common form of dermatitis on the hands of women (and men) who regularly use detergents, washing-up liquids and various household cleaners, especially with hot water. The skin becomes red, sore, dry and rough, especially over the knuckles. It may itch and crack, leading to extreme soreness.

What is the treatment?

The obvious thing to do is work out the cause and remove it or avoid it if possible.

Prevention

Always try to avoid the cause: an example is to get someone to remove any offending plants from the garden. Cut down the use of irritating substances such as solvents, soap, detergents, paint and thinners, scouring powder and pads, turpentine, and various polishes. A barrier cream can be rubbed into the hands before work.

For dermatitis of the hands, wear protective work gloves such as cotton-lined PVC gloves.

For housewife's dermatitis wear rubber gloves (if not sensitive to rubber) or other gloves for washing and peeling or squeezing fruit. Do not use any gloves that develop holes. Use soap substitutes such as Cetaphil lotion or Dove soap and pat dry the hands thoroughly after washing them. Use a dishwasher where possible if dish-washing is a problem.

Self-help

For hand problems, rub in a prescribed cream, ointment or lotion and any moisturiser that helps such as Sorbolene with 10% glycerol or Nutraplus.

Medical help

Your doctor may prescribe a stronger anti-inflammatory cream or ointment such as hydrocortisone if the rash is severe or slow to heal. Sometimes anti-allergy tablets are prescribed. It is common to use patch testing, where suspected substances are applied to the skin to find the exact cause. If the patch test is positive, you should avoid the particular substance.

Coping with a crisis

The harsh reality

No matter how sound and healthy your normal state of mind and body, there is every chance that at some stage during your life you will face some sort of crisis. It may be brought on by a build-up of stress or it may be sudden and unexpected, such as becoming the victim of a crime or by suffering the sudden loss of something or someone precious to you.

Normal reactions

You will naturally feel terrible and react with disbelief and a whole range of emotions and physical feelings that are quite unfamiliar to you. These reactions include fear, helplessness, sadness, anger, shame, guilt, frustration and a terrible let down. The 'why me?' feeling is very real. The feelings usually last for only a few minutes at any one time. All this is a normal response to a crisis, and then you go through a recovery cycle.

Recovery

You may not think so at the moment, but you will soon learn to cope; nature heals in time. The human body has a remarkable ability to cope both physically and mentally with extreme stress. It is therefore important for your own sake and that of your loved ones who rely on you that you cope and keep on an even keel until time heals your misfortune. There is light at the end of the tunnel.

Rules to help you cope

1. Give expression to your emotions

You simply must accept your reactions as normal and not be afraid to cry or call out. Do not bottle up feelings.

2. Talk things over with your friends

Do not overburden them, but seek their advice and listen to them. Do not avoid talking about what has happened.

Talking with a friend can help you cope

3. Focus on things as they are now—at this moment

Do not brood on the past and your misfortune. Concentrate on the present and future in a positive way.

4. Consider your problems one at a time

Do not allow your mind to race wildly over a wide range of problems. You can cope with one problem at a time.

5. Act firmly and promptly to solve a problem

Once you have worked out a way to tackle a problem, go for it. Taking positive action is a step in allowing yourself to get on with life.

6. Occupy yourself and your mind as much as possible

Any social activity—sports, theatre, cards, discussion groups, club activity—is better than sitting around alone. Many people find benefit from a holiday visit to an understanding friend or relative. Religious people usually find their faith and prayer life a great source of strength at this time.

7. Do not nurse grudges or blame other people

This is not easy, but you must avoid getting hostile. In particular, do not get angry with yourself and your family, especially your spouse.

8. Set aside some time every day for physical relaxation

Make a point of doing something physical such as going for a walk, swimming or enjoying an easy exercise routine.

9. Stick to your daily routine as much as possible

At times of crisis a familiar pattern of regular meals and chores can bring a sense of order and security. Avoid taking your problems to bed and getting sleepless nights. Try to 'switch off' after 8 pm. Taking sleeping tablets for those few bad nights will help.

10. Consult your family doctor when you need help

Your doctor will clearly understand your problem, because stress and crisis problems are probably the commonest he or she handles. Consult your doctor sooner rather than later.

- Remember that there are many community resources to help you cope (e.g. ministers, social workers, community nurses, crisis centres, church organisations).
- Take care: drive carefully to avoid accidents, which are commoner during this time.

Coronary risk factors

The problem of coronary heart disease

The number one cause of death in modern Western society is *coronary heart disease* (*CHD*), whether it be from sudden fatal heart attacks or blocked coronary arteries causing angina and heart failure. CHD is responsible for 1 in 3 deaths in Australia. However, there has been a very pleasing reduction in deaths from coronary heart disease and stroke in the past 20 years because people have made the effort to reduce their risk factors. In spite of this, it is still a major cause of preventable death and we still need to work hard at reducing the risk.

What are the risk factors?

- hypertension (high blood pressure)
- smoking
- high cholesterol
- diabetes
- obesity
- lack of exercise
- stress
- alcohol excess
- family history

These risk factors increase the likelihood of development of hardening of the arteries (or *atherosclerosis*); the benefit of reducing them is obvious. The factors are interrelated; for example, excessive intake of alcohol will lead to hypertension.

Hypertension

The higher the blood pressure, the greater the risk. Regular checks, say yearly for people over 40 years, are advisable. Doctors recommend that you have the *diastolic level* (lower level) of blood pressure kept at 90 mmHg or below.

Smoking

Cigarette smoking has been clearly shown to increase the risk of heart disease. The death rate from coronary heart disease is about 70% higher for smokers than for non-smokers and for very heavy smokers the risk is almost 200% higher. The more one smokes, the greater the risk.

It has also been proved that the incidence of heart disease falls in those who have given up smoking.

High cholesterol

It has been proved that high blood cholesterol is related to heart attacks. High cholesterol is caused by a diet high in *saturated* fats, as compared with *polyunsaturated* fats. It is recommended that every effort should be made to keep the blood cholesterol level as low as possible and preferably below 5.0 mmol/L in adults. This acceptable level can usually be achieved through dieting. Saturated fats are found in regular milk and its products (e.g. cream, butter, cheese); fatty meats; pies and pastries, cakes, biscuits and croissants; cooking fats; most fast foods and potato crisps.

Stress and heart attacks

The stress of our modern lifestyle is regarded as a risk factor. Evidence for this is supported by the increased incidence of heart attacks in Asians (who have a low incidence) when they move into Western societies or become business executives in their own environment. Consider ways to modify your stress factors and seek relaxation programs such as meditation.

The significance of risk factors

Most of the risk factors are interdependent, and if two or more are present they have a multiplication effect. If only one risk factor is present, the patient does not have so much cause for concern. Your doctor is the best person to assess the combined risk.

Rules for living

- Do not smoke.
- Drink alcohol in only very small amounts or not at all.
- Keep to an ideal weight.
- Avoid saturated fats.
- Select preferably low-GI foods.
- Have a low-salt diet
- Be careful of CATS—Caffeine, Alcohol, Tobacco, Sugar.
- Take regular exercise.
- Practise relaxation.

Note: The risk factors for coronary heart disease apply also to other cardiovascular disease, such as cerebral artery disease and hardening of the arteries of the legs.

Cramp

What is cramp?

Cramp is a painful spasm in the muscle, usually the calf muscles of the leg. It can also occur in the foot. The affected muscle feels hard and tense, and it is almost impossible to control it.

Who gets cramp?

Cramp happens from time to time in almost everyone, but some are more prone than others to regular cramps. Pregnant women are prone to cramps. They are common in athletes and footballers, especially after long periods of intense running. They are also common after unaccustomed exercise. Many people, especially the elderly, are often roused during sleep by sudden and severe cramps in the calves.

What is the cause?

There is usually no underlying cause other than unaccustomed exercise. It is thought that a type of natural acid substance builds up in the muscles and initiates the cramp. It can also be caused by a prolonged period of sitting, standing or lying in an uncomfortable position. Uncommon causes are more serious medical conditions such as hardening of the leg arteries, thyroid troubles, lack of salt (sodium chloride) in the cells and various drugs.

What is the treatment?

The usual cramp lasts no longer than a minute or so and will usually clear up of its own accord. It can be eased by firmly massaging the affected muscle and flexing the foot back towards you. It is easier if you can get someone to do this for you. Some people claim that they can quickly terminate their cramps by applying firm finger pressure in the webbing between the first and second toes.

Massage the affected muscle

How can night-time cramps be prevented?

Medication

Doctors often prescribe quinine sulphate tablets to take before retiring, but it may be worth trying a glass of tonic water instead.

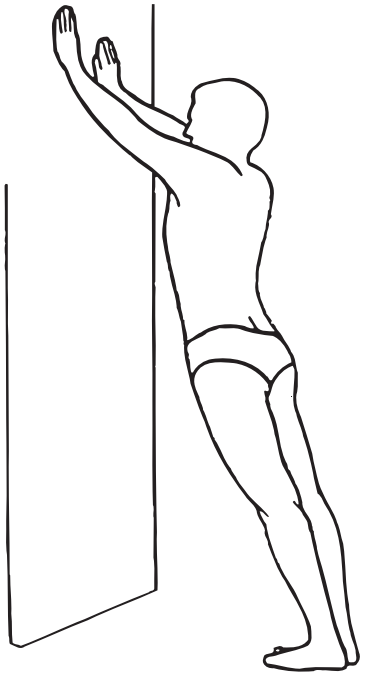
Pillows at the foot of the bed

It is worth trying to keep the bedclothes off the feet and placing a doubled up pillow under the sheet at the foot of the bed so that the feet are kept bent back towards you during sleep. Some people find that raising the foot of the bed about 10 centimetres helps prevent cramps.

Exercises

Certain muscle stretching and relaxation exercises help prevent cramps.

Exercise 1: Stand barefoot about 1 metre from a wall, lean forward with the back straight and your outstretched hands against the wall (as in the diagram). Lift your heels off the floor and then force them into the floor to produce tension in the calf muscles. Hold this position for 20 seconds and repeat about 5 times. Do this exercise 2–3 times a day for a week and then each night before retiring.



Exercise 2: This usually follows exercise 1 before retiring. Rest in a chair with your feet and legs horizontal and with support under your Achilles tendon. Keep this position for 10 minutes.

Croup

What is croup?

Croup is a common viral infection of the upper airway at the level of the throat, namely the voice box (larynx) and windpipe (trachea). It is a special problem in children, who normally have narrow air passages, and usually occurs from 6 months to 3 years of age but can occur up to 6 years or so. The younger the child, the more susceptible he or she is to croup. It tends to occur in the winter months.

What are the symptoms?

A harsh, 'barking' cough and noisy breathing are the main symptoms. Croup usually begins as a normal cold, then a sore throat, hoarse voice and fever follow. The cough, which is dry, hollow sounding and 'barking', is very characteristic. A *stridor* (a high-pitched wheezing or grunting noise with breathing) may develop, and this is a serious sign.

Attacks of croup usually occur at night, causing the child to wake up with a fright and a harsh, brassy cough or stridor. The symptoms are worse if the child is upset and may last for 3 or 4 days, but the first 1 or 2 days are the worst.

What is the danger?

Croup is usually a mild infection and settles nicely; however, in younger children it can sometimes cause complete airway obstruction, which is rapidly fatal. These children need to be in hospital to have specialised treatment and occasionally an airway tube inserted.

What is the treatment?

Humidified air

It is important to keep calm and keep the child calm by comforting them on your lap or wrapping them in a blanket (if it is cold) and carrying them outside, especially if the atmosphere is humid. The traditional method of using steam (danger of burns) and vaporisers is no longer favoured by most doctors. However, moist air does help.

Treatment tips

- Give the child paracetamol for fever.
- Antibiotics will not help, because croup is caused by a viral infection; however, they are used for any bacterial infection that develops with the croup.
- Stay by the child's bedside until the child settles.
- Have the child propped up in bed or lying on a few pillows for support. Watching television can help the child relax.
- Wrapping the child in a blanket and walking around outside may help the symptoms to settle.

Medication

The modern method is to give the child steroids (cortisone) by mouth or by spray for the more troublesome attacks.

When should you seek immediate medical help?

Call your doctor or take your child to the hospital urgently if:

- the stridor gets worse and is present when resting or sleeping
- the breathing becomes very difficult or noisier
- the child becomes blue and pale
- the breastbone of the chest sucks in on breathing
- the child is floppy and dribbling
- the child becomes very restless or irrational
- the child looks sick and you are most concerned

Key points

- Croup is worse at night.
- Keep the child calm.
- Moist air is helpful.
- Croup can be dangerous.
- Get help if you are concerned.

Crying baby

'All noise at one end and no sense of responsibility at the other' is an old saying about infants. However, crying is an important expression to develop a proper interaction between the baby and parent or carer.

What is normal crying?

During the first few weeks, the average baby sleeps a lot and when awake cries loudly and often, usually without tears. The average baby cries or fusses 3 hours a day, reaching a peak at 6 weeks of age. From 6 weeks onwards, the baby has some wakeful periods without crying, and by 6 months spends 3–4 hours a day playing and gurgling without crying.

What is excessive crying?

Crying is excessive when it lasts for long periods when the baby should be sleeping or playing. It appears to be more common with the first baby and is aggravated by parents getting angry with the baby.

A check list of common causes

- hunger
- wet or soiled nappy
- teething
- infant colic
- loneliness or seeking attention
- infection

You should keep these problems in mind when you check your crying baby. However, much of the crying has no specific causes.

Feeding problems and hunger

The main feeding problem that causes crying is underfeeding. If so, the baby will be slow in gaining weight and may pass small, firm, dark-green motions. It is important to check this with your doctor or infant welfare nurse.

Passing urine or wet nappies

Wet or dirty nappies may cause discomfort to babies, and so this needs to be checked. Do not fall for the old trap of thinking that passing urine is painful for the baby. It is worth remembering that crying can cause the baby to pass urine.

Teething

Babies usually cut their first teeth between the ages of 6 months and 2 years. The gum is often swollen and sore at the spots where the tooth erupts. This discomfort can make the baby cry, but it does not usually last for longer than a week.

Infant colic

This is one of the commonest causes of unexplained gusty crying in an infant. It is a distressing but harmless problem that some babies develop from as early as 1–2 weeks of age and lasts until 12–16 weeks. It typically develops in the late afternoon and early evening and lasts for about 3 hours in a day and continues for at least 3weeks.

Loneliness

Some babies may cry because they feel lonely and are looking for comfort and attention. If the baby stops crying when picked up, the cause may well be this lonely feeling.

Infections

Infections are not all that common in infants but will be diagnosed by your doctor. Examples of such infections are a respiratory tract virus, urinary tract infection, gastroenteritis and middle ear infection. A middle ear infection, which can cause much distress, may be indicated by a fever, running nose and the baby pulling at his or her ear.

What should be done?

Simply check out and attend to these common causes. It is important to understand that these crying episodes are not the mother's (or carer's) fault and that the mother needs help to allow her to rest and get over the birth. It is common for some mothers to feel a failure, but nothing could be further from the truth. These crying periods do not usually last very long. A proven successful strategy by the paediatrician Dr Harvey Karp is the 'Rule of five Ss':

1. Swaddling: firm clothing, not too loose.
2. Lie baby on Side or Stomach.
3. Shush, i.e. 'Sshhushing' as loud as they cry.
4. Swing them: sway them from side to side.
5. Sucking: nipple, teat or dummy.

Seek advice from your doctor if you are worried and cannot work out the cause or remedy. You must report any unusual symptoms.

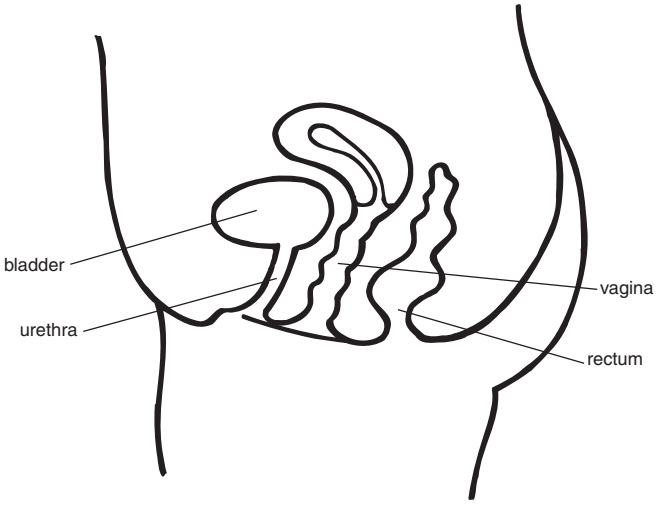
Cystitis in women

What is cystitis?

Cystitis is inflammation of the bladder, which is a very common problem; it is suffered by many women at some stage in their lives. The most vulnerable times are starting sexual activity (hence the term 'honeymoon cystitis'), during pregnancy and after menopause.

What causes cystitis?

It is almost always caused by bacteria travelling upwards along the rather short passage (the *urethra*) from the outside into the sterile bladder. This is often caused by intercourse, which pushes this short passage and bacteria upwards. These bacteria, which are present in the bowel, are normally found around the openings of the anus, vagina and urethra. The bladder soon learns to cope with these germs by a type of local immunity, but some women are prone to recurrent infections.



What are the symptoms?

- burning or stinging when passing urine
- an urge to pass urine often
- passing only small amounts of urine
- discoloured and smelly urine
- fever; pain in the back or low abdomen (may be present)
- feeling generally unwell

What are the risks?

Cystitis is very uncomfortable and irritating, but is not a serious problem. An untreated infection can spread up to the kidneys, and this is serious.

What is the treatment?

Self-help

- Keep yourself rested and warm.
- Drink a lot of fluid: try 2–3 cups of water at first, and then 1 cup every 30 minutes.
- Try to empty your bladder completely each time.
- Gently wash or wipe your bottom from the front to the back with soft, moist tissues after going to the toilet.
- Take analgesics such as paracetamol for pain.
- Cranberry juice or capsules has been shown to alleviate mild urinary infection.

You should visit your doctor if the attack lasts more than 24 hours and bring a fresh specimen of urine, which you should collect after washing your vulva with clean cotton-wool and water.

Medical help

You will be prescribed a course of antibiotics, which should all be taken. Your doctor may advise making the urine alkaline by using Ural or Citravescent. A follow-up urine test will be necessary. If the antibiotics do not work or if you have more attacks, some special tests (including X-rays) may be necessary to check your urinary tract.

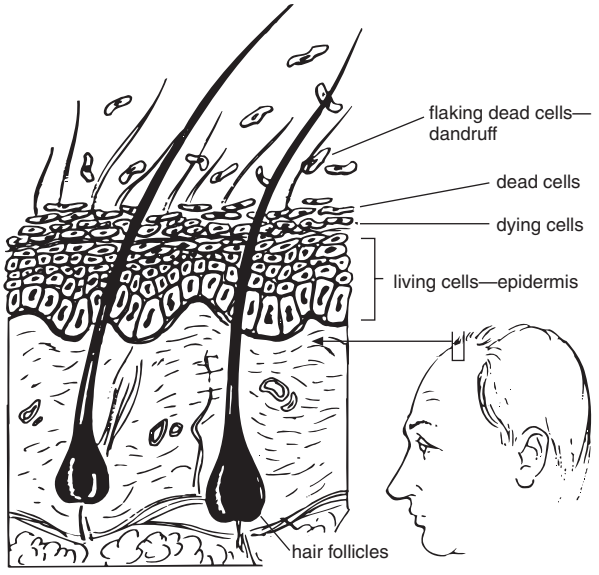
How can you prevent further attacks?

- Get into the habit of drinking plenty of fluids, especially on hot days.
- Pass urine often and when you feel like it—do not let it build up.
- Make sure you empty your bladder each time.
- Wash your bottom gently after each bowel motion, using mild soap and soft tissues.
- Empty your bladder immediately after intercourse.
- If your vagina is dry, use lubrication for intercourse (KY jelly for young women and oestrogen cream after the menopause).
- Wear cotton underwear; avoid tight jeans and vaginal deodorants.
- Cranberries as either juice or capsules have been shown to help prevent recurrences of urinary infection in those prone to get it.

Dandruff

What is dandruff?

Dandruff is the excessive production of small flakes of dead skin on the scalp. It is a normal process, because the cells of the outer layer of scalp skin (the *epidermis*) die and are replaced constantly, like all other cells in the body. The dead cells then move to the outer edge of the skin and flake off after about 1 month.



Skin of the scalp

What does it mean?

Dandruff is a common, normal condition and carries no risk to health whatsoever. Everyone has it to some degree, and some people only notice it when they wear a dark suit, dress or collar. There is an old saying that 'nothing stops dandruff like a blue serge suit'. It is not contagious and does not cause baldness.

What aggravates dandruff?

Dandruff seems to be made worse by a variety of factors such as emotional stress, poor diet, poor hygiene (including rarely washing or shampooing the hair), allergies, and various chemicals and cosmetics applied to the scalp. The skin inflammation called *seborrhoeic dermatitis* is considered to be a most important cause of dandruff.

Does hormone imbalance cause dandruff?

This is thought to be a factor, because it runs a similar course to acne. It is rare under the age of 12, is most common in adolescence and worse around the age of 20.

What about very severe dandruff?

In some people the dandruff is severe and persistent and itchy. Two causes of this are dermatitis of hair-bearing skin (*seborrhoeic dermatitis*) and *psoriasis*. There is usually evidence of these skin disorders on other parts of the body.

What is the treatment?

There are many shampoos that are suitable for the treatment of dandruff, but no one particular shampoo suits everyone. The shampoo selected depends on the severity of the dandruff. The sulphide preparations upset some people because of staining of necklaces and after-odour, but they are effective. If you find a shampoo that suits you, stick with it.

Mild cases

Suitable shampoos are zinc pyrithione (e.g. Head and Shoulders, Dan-Gard), selenium sulphide (e.g. Selsun) and mixed preparations (e.g. Ionil).

The shampoo is massaged into the scalp, left for 5 minutes, then rinsed thoroughly. Use it 2–3 times a week.

Stubborn scaling and itching

This often is due to seborrhoeic dermatitis and psoriasis. Coal tar shampoos are effective for psoriasis. Examples are:

- Ionil T or Ionil T Plus shampoo, followed by Ionil rinse conditioner
- Sebitar shampoo, followed by SebiRinse conditioner

Nizoral shampoo is ideal for seborrhoeic dermatitis. The best way to use it is to start with a milder shampoo, rinse off, then use Nizoral, leave it for 4–5 minutes and then rinse off. Use it twice a week.

If itching is a problem, a cortisone scalp lotion such as Diprosone or Betnovate scalp application can be used.

Dementia

What is dementia?

Dementia is a disorder in which a previously normal brain does not function normally and the affected person becomes confused, forgetful and out of touch with the real world. It is rare in people under 65 years of age and appears more likely to develop with increasing age. It tends to progress slowly after it develops. The cause is not always known, but dementia can follow brain damage from physical abuse such as boxing, excessive alcohol and other drugs, and hardening of the arteries to the brain. There is a genetic tendency to early dementia in some families.

What is Alzheimer's disease?

This refers to a special type of dementia in which there is wasting of some brain cells, the cause of which is uncertain. It can occur at any age, but when it develops at a relatively young age (under 65) it is referred to as *presenile dementia*. It is commoner in people with Down syndrome.

What are the symptoms?

The main feature is *loss of memory* of things that have happened *recently*. You will notice that the person cannot remember what has happened a few hours (or even moments) earlier but can clearly remember events in the past. Other symptoms, which are slowly progressive, include:

- apathy
- confusion and restlessness
- a tendency to wander
- poor powers of reasoning and understanding
- loss of interest in previously enjoyable things
- sleeping problems
- personality changes, such as being suspicious, irritable, withdrawn, humourless, unco-operative or aggressive

The problem occasionally results in marked emotional and physical instability. It is sad and difficult for relatives to watch their loved ones develop aggressive and antisocial behaviour, such as poor table manners, poor personal cleanliness, rudeness and a lack of interest in others. Sometimes severe problems such as violent behaviour, sexual promiscuity and incontinence will eventuate.

How common is dementia?

The older the person, the more likely the problem. The incidence is probably 1 person in 10 over 65 years and 1 in 5 over 80 years.

What are the risks?

There is always the likelihood of accidents with household items such as fire, gas, kitchen knives and hot water. Accidents at the toilet, in the bath and when crossing roads may be a problem, especially if dementia is combined with failing sight and hearing. Such people should not drive motor vehicles.

Without proper supervision they are likely to eat poorly, neglect their bodies and develop medical problems such as skin ulcers and infections. They can also suffer from malnutrition and incontinence of urine or faeces.

What is the treatment?

If you suspect that a friend or relative has early dementia, take him or her to the doctor for assessment. There is no cure, but some modern drugs may delay the progression of dementia. There is evidence that the delay is modest—in the order of 6–12 months. Ask your doctor about this. However, the best that can be offered is tender loving care.

Regular home visits by caring, sympathetic people are important. Such people include relatives, friends, general practitioners, district nurses, home help, ministers of religion and Meals-on-Wheels. The sufferers tend to manage much better in the familiar surroundings of their own home.

Special attention should be paid to organising memory aids such as lists, routines and medication, and to hygiene, diet and warmth. Adequate nutrition, including vitamin supplements if necessary, has been shown to help these people.

Support groups

It is important to contact an Alzheimer's support group in your state or locality. One such special support and advisory group is called ADARDS (the Alzheimer's Disease and Related Disorders Society).

Depression

What is depression?

Most people feel unhappy or depressed every now and again, but there is a difference between this feeling and the mental illness of depression.

Depression is a very real illness that affects the entire mind and body. It seriously dampens the five basic activities of humans: their energy for activity, sex drive, sleep, appetite and ability to cope with life. They cannot seem to lift themselves out of their misery or 'fight it themselves'. Superficial advice like 'snap out of it' is unhelpful, because the person has no control over it.

What is the cause?

The cause is somewhat mysterious, but it has been found that an important chemical is present in smaller amounts than usual in the nervous system. It is rather like a person low in iron becoming anaemic.

Depression can follow a severe loss, such as the death of a loved one, a marital separation or a financial loss. On the other hand it can develop for no apparent reason, although it may follow an illness such as glandular fever or influenza, an operation or childbirth. Depression is seen more commonly in late adolescence, middle age (both men and women), retirement age and in the elderly.

How common is depression?

It is one of the commonest illnesses in medicine and is often confused with other illnesses.

What are the symptoms?

The patient can experience many symptoms, both physical and mental. On the other hand, the classical symptoms of being depressed (crying and not sleeping) may be absent—we call this 'masked depression'. Usually some of the following are present:

- a feeling of not being able to cope with life (e.g. hopelessness, helplessness)
- continual tiredness
- sleeping problems (e.g. early waking)
- eating problems (e.g. poor appetite)
- loss of interest in things such as sex
- inability to enjoy normally enjoyable things
- tension and anxiety
- irritableness, anger or fearfulness
- feelings of guilt or worthlessness or being unwanted
- difficulty in concentrating and making decisions
- headache, constipation or indigestion

The symptoms may vary during the day, but are usually worse on waking in the morning. If they are severe, the depressed person may not feel like living at all.

What are the risks?

Suicide is a real risk. Almost 70% of suicides are due to depression in an otherwise very healthy and happy person. Another very serious and avoidable consequence is marital or relationship breakdown, mainly because depressed people can be unpleasant to live with, especially if their spouse or friends do not understand their suffering.

What must be done?

Depressed people really need urgent medical help, which usually gives excellent results. The risk of suicide is real, and threats must be taken seriously—they are often carried out. Every conceivable effort must be made to get medical help, even if the patient is reluctant to see a doctor.

What is the treatment?

Apart from counselling and support the basis of treatment is to replace the missing chemicals with antidepressant medication. Antidepressants are not drugs of addiction and are very effective but take about 2 weeks before an improvement is noticed. St John's wort, which is a natural antidepressant, has proved to be effective for mild depression. If the person is very seriously depressed and there is a risk of suicide, admission to hospital will most likely be advised. Other more effective treatments can be used if needed. The depressed person needs a lot of understanding, support and therapy. Once treatment is started, the outlook is very good.

Special counselling is also very important. Simply talking about your feelings is most helpful.

Important points

- Depression is an illness.
- It is commoner than is realised.
- It just happens; no one is to blame.
- It affects the basic functions of energy, sex, appetite and sleep.
- It can be lethal if untreated.
- It can destroy relationships.
- The missing chemical needs to be replaced.
- It responds well to treatment.
- Never give up—better times are ahead.

Depression: medication for depression

What is the purpose of your medication?

The medicine is prescribed to correct the chemical changes in your nervous system that have caused your depressive illness. It is known that an important chemical is present in smaller amounts than usual. It is rather like a person low in iron becoming anaemic and being given iron until the system is restored to normal. Most people have an excellent response to the medication.

What is the nature of the medication?

The pills are called *antidepressants*. They are not tranquillisers, pep pills, nerve pills or drugs of addiction. They are designed to lift you out of your depression—to lift your mood and energy and your ability to cope with life.

There is now a great variety of antidepressants and your doctor will select the most suitable one for you.

How soon will the medication work?

It usually takes 2–3 weeks before you notice an improvement. Sometimes it is sooner, sometimes longer, depending on the medicine and the individual person. Because it is difficult to predict your chemistry, the pills may have to be juggled for the first few weeks or even changed if they do not suit.

What is the dosage?

The dose will be clearly explained in the directions on the bottle. The lowest effective dose will be prescribed and the tablets will be gradually increased as required. It is common to start with a smaller dose and then build up the medication.

How long will the treatment last?

It is usual to take the tablets for about 6–9 months, and then they will be reduced slowly. Even if you feel much better after 3 weeks or so, it is important to keep taking the tablets to allow your chemical balance to steadily consolidate. Knocking off the tablets too early may cause a relapse.

What side effects can I expect?

You may experience no bothersome side effects, but you could get some of the following (ask your doctor which group you are taking):

Tricyclic antidepressants

- sleepiness or drowsiness: avoid driving or operating machinery if you feel drowsy
- dry mouth: this is common; you can chew sugarless gum, have sips of water, suck ice or have gargles
- increased appetite: weight gain is common; choose your food carefully (low fat, low sugar, high fibre)
- constipation or difficulty passing urine (in older men)
- difficulty reading fine print
- dizziness on standing or getting up quickly
- sexual problems, mainly with ejaculation

The 'new' antidepressants e.g. SSRIs

- nausea
- nervousness or agitation
- bowel disturbances e.g. diarrhoea, constipation
- insomnia, tiredness
- headache
- dizziness
- sexual problems, mainly with ejaculation
- weakness or lack of strength
- rash
- tremor
- dry mouth
- feeling 'unreal'

If you do experience some of these milder effects, it is usually a sign that the medication is working. You soon adapt to most of these side effects, which can settle after 2–3 weeks. Contact your doctor about any problems—this is very important.

What about alcohol?

Alcohol can interact with the tablets, making you more sleepy or more drunk! A small amount will not hurt you, but do not drink and drive.

What about pregnancy?

It is not advisable to take these tablets if you are planning to become pregnant, but ask your doctor.

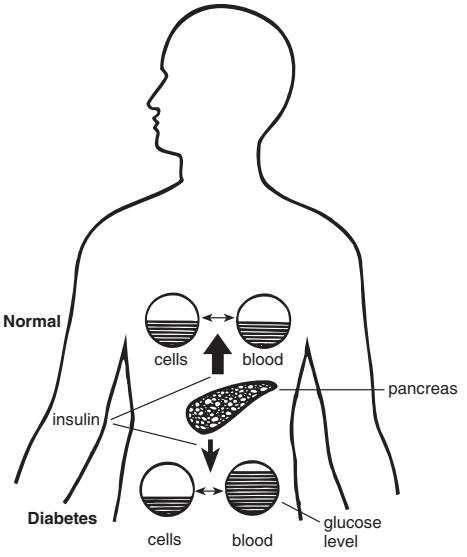
Important points

- Take the tablets as instructed.
- Side effects tend to improve.
- Improvement takes about 2–3 weeks.
- Plan to take them for about 6 months.
- Do not drink and drive.
- Keep the tablets away from children.
- Contact your doctor about any concerns.

Diabetes

What is diabetes?

Diabetes mellitus is a disorder in which there is too much sugar in the blood. It is caused by a lack of an important hormone called *insulin*, which is made by a gland behind the stomach called the *pancreas*. *Diabetes* comes from a Greek word meaning 'to pass or flow through' and *mellitus* means 'sweet'. Insulin controls the balance of sugar (glucose) in the body.



Glucose balance in the body

What are the two main types of diabetes?

Type 1 diabetes is also known as *juvenile-onset diabetes* or *insulin-dependent diabetes mellitus*. It occurs mainly in young people, and because their pancreases produce very little insulin they require injections of insulin. The cause is not known exactly.

Type 2 diabetes is known as *maturity-onset diabetes* or *non-insulin-dependent diabetes mellitus*. It mainly affects people over 40, many of whom are overweight and have a diet with excess calories. It is usually controlled by a proper diet only, but often tablets may have to be used. Insulin may be needed also for ultimate control.

What are the symptoms?

The classical symptoms of untreated diabetes are:

- excessive and frequent urination (every hour or so)
- excessive thirst
- loss of weight (mainly in type I)
- tiredness and lack of energy
- a tendency to get infections, especially of the skin

How common is the problem?

About 1 person in 30 gets diabetes. It tends to increase as we get older because the pancreas, like other organs, tends to wear out.

What are the risks?

Modern treatment is very effective for diabetes, but the results depend on the patient following the treatment, especially the diet. If diabetes is untreated, the complications are very severe and include coma (from the blood sugar being either too high or too low), kidney disease, blindness and heart disease. The feet and eyes are at special risk and need special care and regular checks.

Can diabetes be cured?

No, not yet, but it can virtually always be controlled by a proper diet and regular exercise, and if necessary insulin or special tablets. Although the diagnosis comes as a shock to patients, it is not the major problem that it is generally believed to be—most patients lead normal lives. A key factor is to get good control of blood pressure as well as blood sugar and cholesterol.

Is diet a vital treatment?

Yes; all diabetics require a special diet in which carbohydrate and fat intake is controlled. The objectives of the diet are:

- to keep to ideal weight (neither fat nor thin)
- to keep the blood sugar level normal and the urine free of sugar

This is achieved by:

- eating good food regularly (not skimping)
- spacing the meals throughout the day (three main meals and three snacks)
- cutting down fat to a minimum
- avoiding sugar and refined carbohydrates (e.g. jam, honey, chocolates, sweets, pastries, cakes, soft drinks)
- eating a balance of more natural complex carbohydrates (starchy foods) such as wholemeal bread, potatoes and cereals
- eating a good variety of fruit and vegetables
- cutting out alcohol or drinking only a little
- learning about glycaemic index (GI) foods and preferably eating low-GI foods

Is exercise important?

Yes—it really benefits your health. Exercise is any physical activity that keeps you fit. Good examples are brisk walking (e.g. 2 km per day), jogging, tennis, skiing and aerobics. Aim for at least 30 minutes 3 times a week, but daily is ideal. Go slowly when you start.

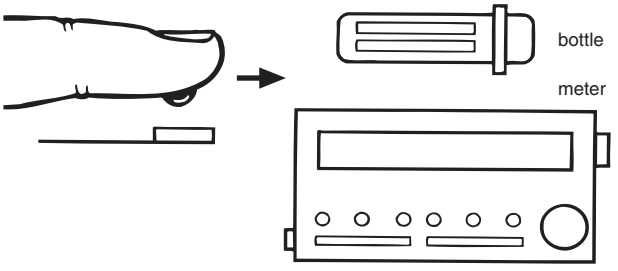
Good advice

- Exercise is important.
- Do not get overweight.
- A proper diet is the key to success.
- A low-fat, low-sugar diet is needed.
- Do not smoke.
- Minimise alcohol.
- Take special care of your feet.
- Self-discipline will help make your life normal.

Diabetes: blood glucose monitoring at home

How do you check blood glucose levels?

Put blood from a finger prick on a strip. Blot off excess blood with a tissue. Read the strip either by comparing the colour with the colour chart on a bottle or by using an electronic meter. It is important to follow the instructions on the bottle or meter carefully.



When should you check the levels?

Routinely

For type 2 diabetes (usually controlled by diet and tablets, or by diet alone), 2–3 times each week at different times of the day is enough.

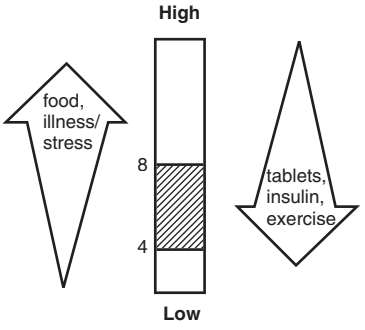
For type 1 diabetes (which requires insulin), more regular checking is required; that is, at least once a day, usually first thing before breakfast and then about 2 hours after a meal.

Your blood glucose levels are likely to be *low* before meals, and *high* 2 hours after meals.

Special circumstances

Stress, illness or too much food will push your blood glucose *up*. Exercise and your medications will pull the blood glucose *down*.

When you are ill or under a lot of stress or exercising more than usual, you may need to check your blood glucose level more often than usual.



What are the ideal levels?

Ideal blood glucose levels are 4–6 mmol/L before meals and 4–8 mmol/L 2 hours after meals.

Fair control is 6–8 mmol/L before meals and 8–11 mmol/L after meals.

Poor control is over 8 mmol/L before meals and over 11 mmol/L after meals.

Key points

1. Check your blood glucose regularly, and record the result and the date and time of the test.
2. Be careful to follow the instructions accurately.
3. Ideal blood glucose levels are between 4 and 8 mmol/L.
4. If you are ill or under stress, your blood glucose level is likely to go up. You should check it more often than usual, and see your doctor if it does go up.

Don't forget to record the date, time and result of your blood tests.

Diabetes: foot care for diabetics

Why are doctors so concerned about your feet?

Problems with the feet are common complications that diabetics suffer from and need special attention. A foot problem can be very difficult to heal once it has set in. Diabetes can decrease the circulation to your feet so that healing is relatively poor. Diabetes can also affect the nerves to the feet so that they are less sensitive to pain, touch and temperature. Diabetics are also prone to infection because the feet are almost 'out of sight and out of mind' and problems can develop without your being aware of them. Very special care of your feet is essential, and they should be checked every day.

What type of problems occur?

Pressure sores can develop on the soles of your feet from things such as corns, calluses and stones or nails in your shoes. Minor injuries such as cuts and splinters can become a major problem through poor healing. Problems with toenails such as *paronychia* (infection around the nail) and ingrowing nails can get out of control. Prevention of these problems is the best way. Watch out for soggy skin between the toes.

What should you do?

1. Keep your diabetes under good control and do not smoke.
2. Check your feet *daily*. If necessary use a mirror to inspect the soles. If your vision is poor ask someone else to check for you. Report any sores, infection or unusual signs. Make sure you check between the toes.
3. Wash your feet daily:
   - Use lukewarm water (beware of scalds).
   - Dry thoroughly, especially between the toes.
   - Soften dry skin, especially around the heels, with lanoline.
   - Applying methylated spirits between the toes helps stop dampness: a cotton bud can be used.
4. Attend to your toenails regularly:
   - Clip them straight across with clippers.
   - Do not cut them deep into corners or too short across.
5. Wear clean cotton or wool socks daily; avoid socks with elastic tops.
6. Exercise your feet each day to help the circulation in them.
7. Check the insides of your shoes each week or before wearing them to make sure no nails are pointing into the soles.

How to avoid injury

- Wear good-fitting, comfortable leather shoes.
- Shoes should never be 'broken in'—they should fit from the start.
- The shoes must not be too tight or too loose.
- Do not walk barefoot, especially out of doors.
- Do not cut your own toenails if you have difficulty reaching them or have poor eyesight.
- Avoid home treatments and corn pads that contain acid.
- Be careful when you walk around the garden and in the home. Sharp objects such as stakes in the garden, protruding nails and sharp corners of beds at floor level should never be in the home of a diabetic.
- Do not use hot-water bottles or heating pads on your feet.
- Do not test the temperature of water with your feet.
- Take extra care when sitting in front of an open fire or heater.

Visit the expert

If you have problems with your foot care and especially if your physical condition makes attending to toenails, corns and calluses difficult, you should visit a podiatrist. Your doctor will advise you.

Diabetes: healthy diet for diabetics

Diet is the key to controlling both type 1 and type 2 diabetes.

A proper diet for people with diabetes is based on a healthy eating plan that applies to all people. There is no need to prepare separate meals or buy special foods.

The basis of the diet is reduction in total energy from fat and sugar and having a high-fibre complex carbohydrate diet of foods such as wholemeal bread, rolled oats, pasta, beans, lentils, apples and low-sugar breakfast cereals.

Meals should be eaten at regular times and spread throughout the day. It is good to be advised by a diabetic nurse educator.

Simple healthy guidelines:

- Limit sugar in your diet.
- Limit fat.
- Limit alcohol.
- Drink lots of water.
- Reduce salt in cooking and on food.
- Eat a variety of fruit, vegetables, cereals and bread.
- Eat fish regularly.
- Eat a high-fibre diet.

Objectives

- Achieve an ideal weight through diet and exercise (most important).
- Maintain a diet low in fat and sugar and high in fibre and complex carbohydrates.
- Aim to eat a complex carbohydrate at each meal.
- Keep the fasting blood sugar below 6 mmol/L.

Fat in the diet

People generally eat too much fat and it should be reduced. Common sources of fats and oils are:

- high-fat dairy products
- high-fat meats
- fats added to cooking
- snack and takeaway foods
- processed sausages and smallgoods

Carbohydrates and the glycaemic index (GI)

Carbohydrates are good for people with diabetes as they provide a ready source of essential glucose in the blood stream. However, different carbohydrates affect blood glucose levels differently.

It is best to prevent your blood glucose level from swinging too high or too low. The 'best choice' carbohydrates are those that cause the smallest rise in blood glucose levels because they are digested slowly and released slowly. As a general rule the slow-acting carbohydrates that are rich in fibre—the complex carbohydrates—are best. These are called *low glycaemic index* or *low-GI* foods, ('glycaemic' is a term for blood glucose).

The glycaemic index is related to a standard of 100 represented by taking 50 grams of glucose. It has a scale of 1 to 100. High-GI foods are those above 70. Low-GI foods are those below 55.

It is good to have at least one low-GI food at each meal.

Examples of low-GI foods

- *Cereals*: Porridge, oat bran, Special K™, muesli, All-Bran™.
- *Breads*: Wholegrain, fruit loaf, sourdough, raisin bread, pumpernickel.
- *Fruit*: All fresh fruit especially apples, firm bananas, oranges, stone fruit, grapes, canned fruit in natural juice.
- *Vegetables*: All fresh, frozen and canned vegetables.
- *Dairy*: Milk (especially skim, low-fat), yoghurt, low-fat cheese (e.g. cottage).
- *Starchy foods*: Sweetcorn, lentils, pasta, noodles, basmati rice, brown rice, sweet potato, dried beans and baked beans.
- *Snacks*: Prunes, dried apricots, nuts, Vita Weat™ biscuits, Snack Right™ biscuits, peanuts, dark chocolate.

Examples of high-GI foods

- *Cereals*: Cornflakes™, Rice Bubbles™, Coco Pops™, Nutrigrain™.
- *Breads*: White, wholemeal, crumpets, scones, bagels, French bread.
- *Fruits*: Watermelon, dates, ripe bananas.
- *Dairy*: Cream, butter, ice-cream, cheese.
- *Starchy foods*: Potato (including baked, mashed, boiled and chips), regular rice, Calrose and Jasmine rice.
- *Snacks*: Pretzels, Twisties™, glucose lollies, most biscuits, water crackers, rice cakes, raisins, corn chips, cordials.

Other general advice

- Use low-fat cooking methods.
- Use low-fat spreads (e.g. light margarine, ricotta or cottage cheese).
- Use low-fat cuts of meat and poultry without the skin.
- As a rule avoid foods that contain large amounts of added sugar, for example sweets, cakes, sweet biscuits, chocolates, soft drinks, jellies and desserts (can be eaten occasionally).
- Discuss a personalised meal plan with your dietician or doctor.
- The GI of foods can be found at

  www.glycemicindex.com

Diabetes: insulin injections

The proper injection of insulin is very important to allow your body, which lacks natural insulin, to function as normally as possible. You should be very strict about the way you manage your insulin injections and have your technique down to a fine art.

Common mistakes

- poor mixing technique when mixing insulin
- wrong doses (because of poor eyesight)
- poor injection technique—into the skin or muscle rather than the soft, fatty layer
- not taking insulin when you feel ill

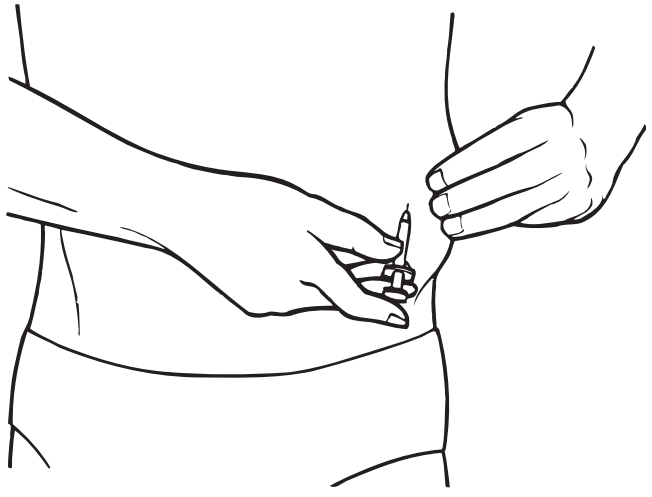
When to inject insulin

Develop a set routine including eating your meals on time and giving the injections about 30 minutes before your meal.

Where to inject insulin

The injection should go into the fatty (*subcutaneous*) tissue between the skin and muscle. The best place is the abdomen below the navel. Other suitable areas are the buttocks and thighs. These areas have a good layer of fat under the skin and are free of large blood vessels and nerves. It is advisable to stick to one area, and the abdomen is recommended. Avoid giving injections into your arms, near joints, the navel and the groin.

Do not inject too often into the same small area (it can damage the tissue). Give the injection at a different place each time. Keep a distance of 3 cm (1½ inches) or more from the last injection.



How to inject insulin

- Lift up or pinch a large area of skin on your abdomen between your thumb and fingers.
- Hold the syringe in your other (dominant) hand between your thumb and middle finger: this leaves the index finger free to push the plunger.
- Insert the needle straight in (like a dart) at right angles to the skin (push the needle well in but not into the muscle).
- Push the plunger all the way down.
- Quickly withdraw the needle.
- Press down firmly (do not rub or massage) over the injection site for up to 60 seconds.

Drawing up the insulin

Make sure your technique is checked by an expert.

You may be using either a *single insulin* or a *mixed insulin*. A mixed insulin is a combination of shorter- and longer-acting insulin and is cloudy.

Rules for mixing

- Always draw up clear insulin first.
- Do *not* permit any of the *cloudy* insulin to get into the *clear* insulin bottle.
- Do *not* push any of the *clear* insulin into the *cloudy* insulin bottle.

Drawing up rules

- Wash and dry your hands beforehand.
- Gently roll the insulin bottle between your hands to mix—do not shake it.
- Always draw up air equal to the dose of insulin into the syringe.
- Always expel air bubbles and ensure you do not inject air.

Storing insulin

- Keep insulin stores (unopened bottles) in the refrigerator, *not* the freezer.
- Opened bottles can be stored in a cool, dark place; refrigeration is not necessary.
- Keep insulin out of heat and sunlight.
- Keep an eye on expiry dates on the bottles.

Golden rules

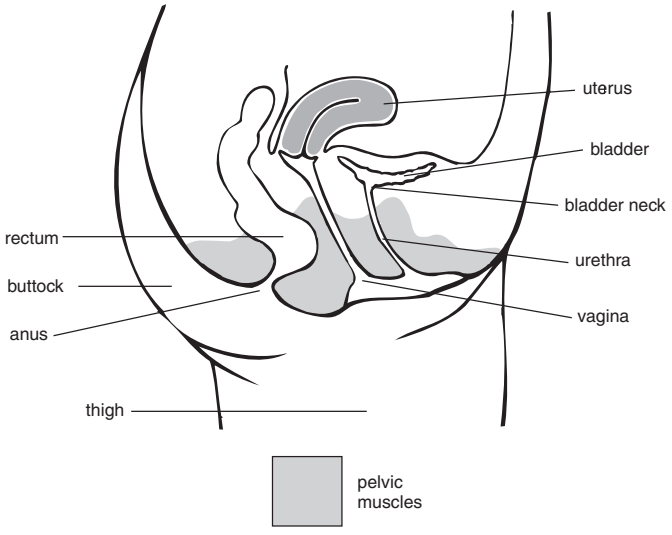
- Take your insulin every day, even if you feel ill.
- Do not change your dose unless instructed.

Incontinence of urine

These exercises are designed to help women with incontinence of urine. *Incontinence* means wetting yourself when you do certain things such as coughing, running, sneezing or laughing, or when your bladder gets full and you pass urine before you reach the toilet.

Pelvic muscle exercises

The muscles around the pelvis (pelvic muscles) are very important in supporting the bladder, urethra, vagina and rectum (see diagram). Following childbirth or with advancing age, these muscles may weaken. They may be strengthened by regularly practising pelvic muscle exercises. If these exercises are practised throughout life, they will reduce the chances of becoming incontinent. An outline of some of these exercises is given here. A physiotherapist may be able to assist in assessing and teaching pelvic muscle exercises.



Simplified cross-section of the female pelvis

Stage 1

To identify the correct muscles to exercise, do the following exercises during the first week:

(a) To identify the muscles around your back passage or rectum, sit or stand comfortably and imagine that you are trying to control diarrhoea by consciously tightening the ring of muscles around the back passage. Hold this 'squeeze' for 4 seconds each time.

(b) Go to the toilet and commence passing urine. Now try to stop the flow of urine in midstream. Once this is done, recommence voiding until the bladder has emptied. The muscles used to slow or stop the flow of urine are the front pelvic muscles, which help support the bladder.

(c) Some women find they can identify the correct pelvic muscles by inserting a finger into their vagina, then squeezing the finger by contracting the pelvic muscles. If the finger cannot be felt to be squeezed, probably the wrong muscles are being exercised or the muscles are still very weak. Do not give up, but proceed with the stage 2 exercises.

Please note

- Do *not* bear down as if trying to pass a bowel motion (or as a woman would do during childbirth). This strengthens the wrong muscles and may make the incontinence worse.
- It may take a week or more to begin to identify the muscles that need to be exercised to regain the strength and tone of the pelvic muscles.

Stage 2

Now that the correct muscles have been identified, these are the pelvic exercises to do every day. They should *not* be done while passing urine.

(a) While sitting or standing with thighs slightly apart, contract the muscles around the back passage (rectum) then the front muscles around the vagina. Hold this contraction while counting to 5 slowly. Now relax these muscles. Repeat this 4 times. Try to be aware of the squeezing and lifting sensation in the pelvis that frequently occurs when these exercises are done correctly.

(b) While sitting or standing, tighten the muscles around the front and back passage together. Hold this contraction for just 1 second and relax. Repeat this exercise 5 times in quick succession.

Please note

- These 'slow' and 'quick' exercises are important to strengthen the pelvic muscles properly.
- In stage 2, it is *not* appropriate to do the stage 1 exercise of stopping the flow of urine each time urine is passed at the toilet. This is only a preliminary exercise.
- These exercises ideally can be done every hour, but certainly not less than 4 times every day.
- With practice, the exercises should be quite easy to master, and they can be carried out at any time—while waiting for a bus, standing at the sink or watching television. There is no need to interrupt the daily routine.
- Once every week or two, it is important to return to stage 1 for a quick check that the correct muscles are being used.

Other measures

- Maintain ideal weight (being overweight hinders the exercises).
- If exercises don't work a trial of a drug may be worthwhile.
- Surgery may help stress incontinence.

Note

Check with your doctor if you are having persistent problems.

Diet guidelines for good health

At times we get confused about what we should or should not eat. The following recommendations come from authorities on nutrition, such as government Health Departments. These guidelines ensure an adequate intake and balance of all important nutrients—carbohydrates, proteins, fats, fibre, vitamins and minerals.

1. Choose a nutritious diet

Choose from a wide variety of foods to provide meals that are healthier, cheaper, tastier and easier to prepare.

2. Control your weight

Prevent obesity by cutting back fats, sugar and alcohol. Reduce the size of servings (say 'no' to seconds) and increase physical activity.

3. Eat less fat

Select fish, poultry and lean meats; trim excess fat from meat and the skin from poultry. Limit the amount of butter or margarine on vegetables and bread. Use the minimum of cooking fats. Limit the intake of full-cream products, fried foods, fatty takeaway and snack foods.

Use monounsaturated (e.g. olive) oils for cooking rather than polyunsaturated oils.

4. Eat less sugar

Avoid or reduce sweet foods such as lollies, sugar, soft drinks, syrups, biscuits and cakes. Reduce the sugar in recipes. Use fresh fruit instead of canned fruit.

Instead, increase your intake of complex carbohydrates that contain starch and fibre. Eat more wholegrain breads and potatoes prepared without added fat.

5. Eat more breads and cereals, fruit and vegetables

Eat more fruit and vegetables, including dark-green vegetables, potatoes and corn. Choose wholegrain products—cereals, bread, bran, rice and oatmeal. Learn about the value of complex carbohydrates.

6. Drink less alcohol

Limit alcohol to no more than two drinks a day. Drink with smaller sips each time. Reserve alcohol for special occasions and to only one occasion in the day.

7. Use less salt

High sodium intake may raise your blood pressure. Use few salty processed foods, including canned vegetables, meats, chips, crackers, sauces and meat pastes. Read labels on canned and packaged foods for their sodium content. Use little salt for cooking and at the table.

8. Encourage breastfeeding

Breastfeeding gives the best nutritional start to life.

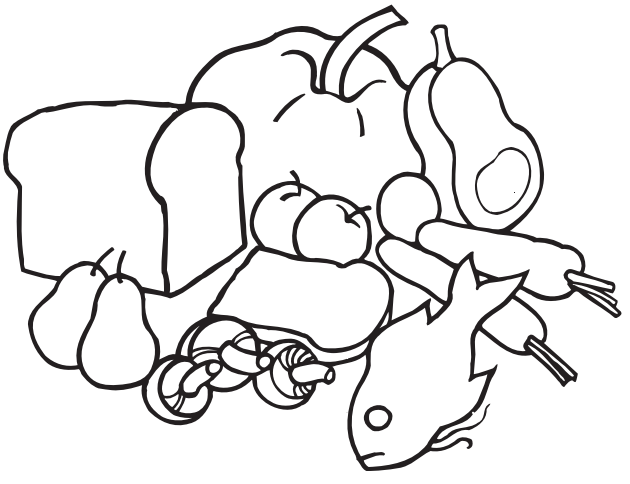
9. Drink more water

Use water in preference to soft drinks, coffee and tea, cordials and alcohol. Use water filters and purifiers if your water supply is not pure.

Extra tips on diet

- Do not eat animal meat every day, and then eat small portions.
- Limit tea and coffee intake.
- Eliminate or reduce takeaway foods (high in salt and fat).
- Eat fish* at least twice a week, preferably daily.
- Plant food is good for you—have it as part of breakfast.
- What you *usually* eat matters most, not what you *occasionally* eat.

* Avoid regularly eating larger fish known to have high mercury levels (e.g. swordfish, tuna).

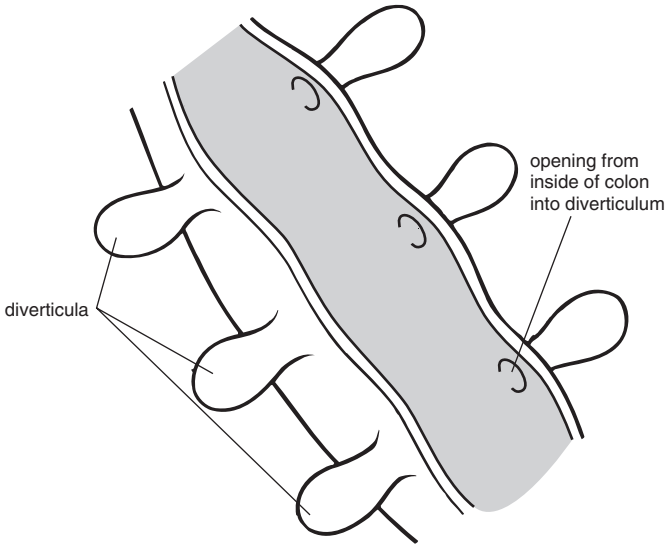


Diverticular disease

What is diverticular disease?

Diverticular disease (also called *diverticulosis*) is the presence of small blind sacs called *diverticula* in the wall of your large bowel (colon). It is related to a lack of fibre in your diet. About 1 person in 3 over the age of 60 years throughout the Western world has this problem.

It is not really a disease, but a condition in which small pouch-like swellings hang from the bowel wall. Infection in such a pouch is called *diverticulitis*.



Colon open to show appearance of diverticula

What is the cause?

Normally, the large bowel moves the faeces along its length with gentle rhythmic contractions of muscles in the bowel wall—this is called *peristalsis*. Without adequate fibre in the diet the motion is dry, small and difficult to move along. The intestinal muscles must therefore perform strong contractions and generate high pressure. This high pressure may push the inner lining through the weaker spots in the wall, rather like blowing up a balloon. The pockets or pouches formed are called *diverticula*. You may have many of these diverticula along the length of the large bowel. There appears to be a family history of diverticular disease, suggestive of an inherited factor. Constipation leading to straining to move and open your bowels is a predisposing factor.

What are the symptoms?

Diverticular disease rarely causes symptoms and most people have it without knowing. A lack of fibre in the diet can cause you to experience bloating, flatulence (desire to pass wind) and abdominal pains.

Are there any tests?

There are two tests done to confirm diverticular disease. The first is *sigmoidoscopy* or *colonoscopy*. A hollow tube is passed into the back passage, through which your doctor can see the bowel lining. The second is a *barium enema*. Barium dye is forced into the back passage; a series of X-ray films clearly show diverticula outlined by use of this dye.

Are there any complications?

Complications are infection and bleeding, which are uncommon. If infection (diverticulitis) develops, you will experience abdominal pain, nausea and fever. These symptoms or any bleeding require prompt attention by your doctor.

What is the treatment?

The gradual introduction of fibre with plenty of fluids (especially water) will improve any symptoms you may have and reduce the risk of complications. Your diet should include:

1. cereals, such as bran, shredded wheat, muesli or porridge
2. wholemeal and multigrain breads
3. fresh or stewed fruits and vegetables

Bran can be added to your cereal or stewed fruit starting with 1 tablespoon and gradually increasing to 3 tablespoons a day. Fibre can make you feel uncomfortable for the first few weeks, but the bowel soon settles to your improved diet.

Note

Any unusual symptom, such as bleeding, constipation, diarrhoea and other changes in your normal habit, may be a sign of bowel cancer. If they occur, report to your doctor.

Dysmenorrhoea (painful periods)

What is dysmenorrhoea?

It is the medical term for painful periods. These can occur as part of an otherwise normal menstruation cycle—this is known as *primary dysmenorrhoea*.

On the other hand, painful periods can be caused by a problem that has developed in the womb, such as fibroid tumours or an infection—this is called *secondary dysmenorrhoea*.

What causes primary dysmenorrhoea?

It is caused by high levels of *prostaglandins*, which are natural substances produced by the lining of the womb. One of the actions of prostaglandins is to cause the muscles of the womb to contract tightly, thus producing cramping sensations. The problem is associated with the onset of ovulation, that is when the ovary starts releasing eggs.

What are the symptoms?

Period pains vary a lot in strength and in position. Some women have a dull dragging pain in the abdomen or lower back or in both areas; others have more severe cramping abdominal pain. In some the pain may be felt in front of the thighs.

The pain is worse at the beginning of the period and may even commence up to 12 hours before the menses appear. It usually lasts for 24 hours, but may persist for 2 or 3 days.

Some women may get nausea and vomiting, and in severe cases fainting may occur.

What are the risks?

Dysmenorrhoea is very common, but most cases are mild and do not require medical attention. There is no risk at all unless it is a symptom of an underlying problem such as pelvic infection.

What is the treatment?

Studies indicate that taking 100 mg of vitamin B1 (thiamine) daily is worth trying. For most women pain-killers such as paracetamol relieve the pain. If simple analgesics are ineffective it is recommended to take an anti-inflammatory agent such as naproxen or ibuprofen—speak to your doctor about this. If the pain is severe, your doctor may prescribe a stronger analgesic that neutralises the effect of prostaglandins. Taking the contraceptive pill usually stops dysmenorrhoea. It often disappears after you have a baby or as you get older.

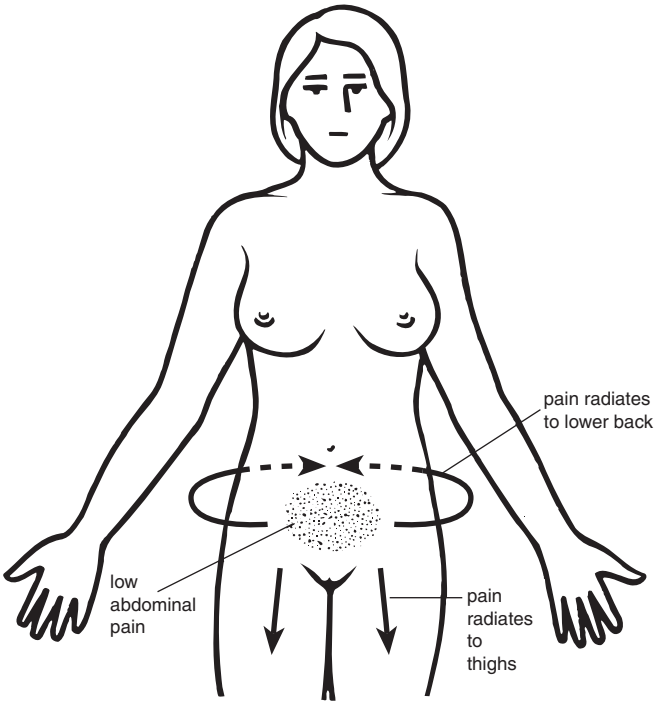
Keeping fit by leading a healthy lifestyle (including avoiding smoking and excessive alcohol and undertaking regular exercise) seems to help, as does practising relaxation techniques such as yoga.

If you get severe pain, rest in bed.

Simple measures such as placing a hot-water bottle over the painful area and curling your knees up to your chest as you lie on your side may provide relief.

When should you consult your doctor?

Consult your general practitioner if the pain worsens or if you develop period pain following 3 or 4 years of relatively pain-free periods.



Typical sites of period pain

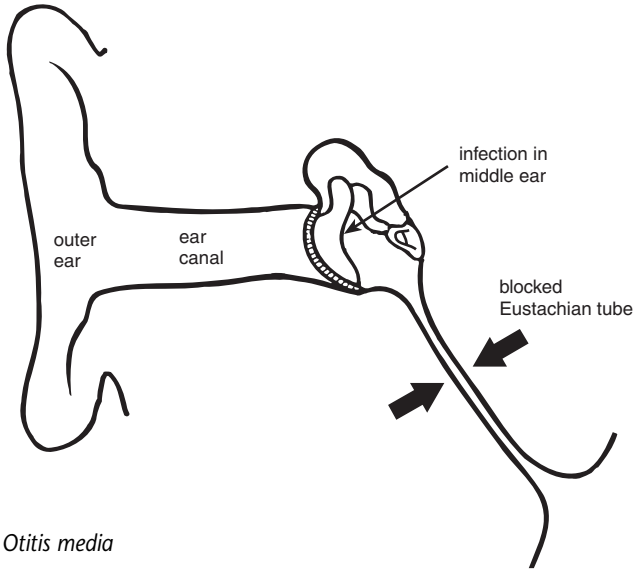
Earache in children

What causes earache in children?

The commonest cause of earache is acute infection of the middle ear (*otitis media*), which usually follows a nose or throat infection such as the common cold.

Another common cause, especially in older children, is infection of the outer ear (*otitis externa*) caused by fungi or bacteria that infect ears blocked with wax, water and sweat. This often occurs after swimming, and so is more prevalent in summer.

An important cause to consider is a foreign body in the ear (e.g. an insect or the child poking something down the ear). This could even cause a ruptured eardrum.



Otitis media

Middle ear infection (otitis media)

What is the cause?

Viruses and bacteria can travel up the short and narrow Eustachian tube, which connects the middle ear to the back of the throat. When this tube becomes congested and blocked from a cold, the germs get trapped in the middle ear cavity and cause a painful infection, often with infected fluid (pus). The younger the child, the more likely is infection. The two commonest age groups appear to be 6–12 months and 5–6 years (when school is commenced).

What are the symptoms?

The main symptoms are:

- earache, often intense pain
- irritability
- frequent rubbing or pulling of ear
- fever or general feeling of being unwell
- usually a blocked or runny nose

There may also be:

- poor hearing
- a discharge from the ear

What should you do?

- Place the child in an upright position with pillows or by nursing in your lap.
- Give analgesics such as paracetamol. (It is very important to relieve pain.)
- Give a decongestant to free the Eustachian tube, preferably an oral one but nose drops or spray can be used. Only use this if there is nasal congestion and for 3 days only.
- Contact your doctor, who may prescribe an antibiotic after inspecting the ear.

Glue ears

It is advisable to have your child checked after a middle ear infection to see that the ear has returned to normal. Sometimes a 'glue ear' (*secretory otitis media*) follows acute otitis media. This is the build-up of a sticky glue-like fluid that gets trapped behind the drum when the fluid cannot drain out of the Eustachian tube.

What are the symptoms?

- deafness (usually partial only) and inattentiveness
- earache (usually mild)

What is the treatment?

Glue ears usually get better naturally but can be helped with decongestant medicine and strong nose-blowing exercises. If possible, get the child to pinch the nose and blow out hard against the back of the hand. Sometimes it is necessary to operate to drain the sticky fluid out of the ear by placing small drainage tubes through the drum.

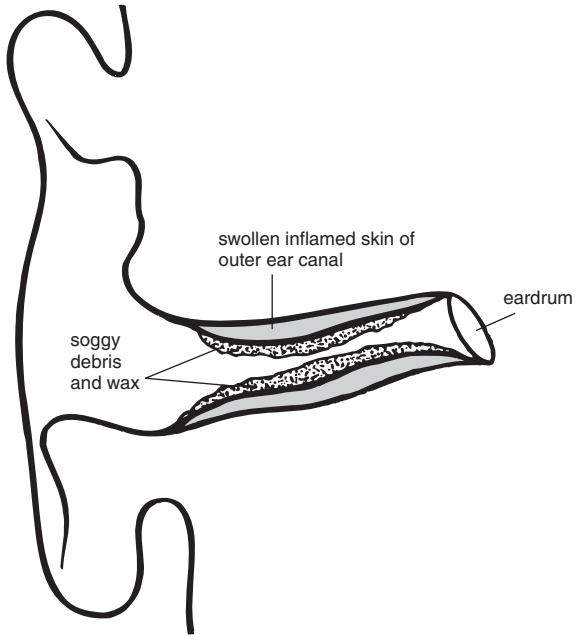
Ear: otitis externa

What is normal?

The outer ear canal is a tunnel that runs from the ear hole to the eardrum. It is about 3 cm long and is lined with normal skin containing hairs and glands that produce wax (see diagram). The outer ear canal is a blind (closed) tunnel and normally drains only through the ear hole.

What is otitis externa?

Otitis externa is a condition in which the skin lining the outer ear canal becomes red and swollen due to infection. This infection occurs commonly because of water entering the ear canal and is sometimes referred to as 'swimmer's ear'. In the tropics, the heat and high humidity cause people to perspire excessively in summer, and this moisture may also play a part in causing otitis externa or 'tropical ear'.



The ear canal is subject to infection

What are the symptoms?

Pain and tenderness of the ear canal are typical, and in severe cases the pain and tenderness may spread to the outer ear and surrounding skin. Other symptoms include discharge from the outer ear canal, itching and reduced hearing.

Why does it occur?

Water entering the outer ear canal can drain only through the ear hole. The outer ear canal is horizontal and curved; it may contain wax. Water may not drain freely and can cause skin to become soggy, so allowing bacteria or fungi, normally present on the skin, to cause infection.

Who is more prone to otitis externa?

You are more likely to suffer from otitis externa if your outer ear canal is narrow or long, or if the skin lining the canal is in poor condition (i.e. if it is not waterproofed by the wax and is wet by regular swimming). Incidentally, chlorinated fresh water is more damaging than salt water.

The skin lining will deteriorate too if it is prone to dermatitis or eczema and if exposed to chemicals (e.g. hair shampoo, hair dyes and ear ointments). The ear canal can be damaged by attempting to clean it with a hairpin.

What is the treatment?

The basis of successful treatment is to clean the canal and keep it empty and dry. In mild cases your doctor will treat the infection by cleaning the outer ear canal using suction or a probe and then prescribing cream to insert several times a day. The ear cream is used for about 5 days and contains chemicals that kill the bacteria or fungus causing the infection.

If the infection is severe and the outer ear canal is swollen, the doctor may insert a cotton wick coated with the healing cream into the ear canal.

How can otitis externa be prevented?

You can take a number of steps to prevent otitis externa. Among them are:

- Avoid getting water in your ear.
- If water enters, shake it out or use Aquaear drops.
- Use moulded earplugs or a bathing cap when swimming.
- Use earplugs or a cap when showering.
- Use earplugs when washing your hair.
- Coat cottonwool with petroleum jelly (Vaseline) before insertion in ears.
- Avoid poking objects such as hairpins and cotton buds in the ear to clean the canal.

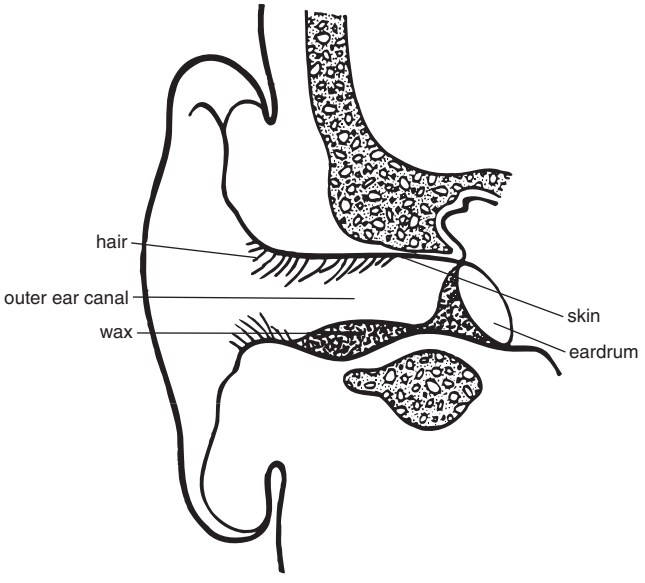
The ear usually cleans itself naturally. Do not attempt to clean it and risk infection of the canal or damage to the eardrum. If you have a problem, contact your doctor for advice and treatment.

Ear: wax in your ear

What is normal?

The outer ear canal is a tunnel that runs from the ear hole to the eardrum. It is about 3 cm long and lined with normal skin containing hairs and small glands that produce wax. The purpose of the wax is to protect the skin of the ear canal and give it a waterproof coating.

Wax is therefore quite normal and people should not feel embarrassed about it building up in their ears. Excessive wax is one of the commonest problems seen by doctors, who are aware of the discomfort it can cause.



Excessive wax in the ear

How does excessive wax develop?

The glands can produce too much wax or there can be a problem preventing normal drainage of the wax out of the ear.

What are the symptoms?

Most people are not aware that their ear is full of wax until they have a hearing problem or a waxy discharge, but if an infection develops in the skin under the wax the ear might itch and ache.

Hearing can be affected by the wax pressing against the eardrum, making it rigid; even a small amount of wax can cause this.

The wax can be pressed onto the drum by:

- water (when swimming or showering)
- earplugs
- objects inserted in the ear, such as cotton-tipped applicators

What is the treatment?

The doctor can remove excess wax by syringing the ear with water, using a suction instrument or cleaning it out with a fine probe.

Before treatment you might be asked to use wax-softening drops for a couple of days. Some patients find that the drops cause a burning sensation. If this happens, stop using them immediately and notify the doctor.

How can wax problems be prevented?

If you have a tendency to build up wax in the ear, you might be advised to use the ear drops regularly to soften the wax so that it can drain out.

If you use a hair dryer cover your ear with your hand since the hot air can harden the wax in your ear.

Cleaning the ear

The ear canal has a self-cleaning action that allows natural and unnoticeable removal of the wax. So, the ear should be left alone: 'Never put anything smaller than your elbow in the ear'.

If you have a wax problem, see the doctor for advice and treatment. Do *not* try to fix it yourself: you might cause an infection in the ear canal, or damage the eardrum and affect your hearing permanently.

Eating disorders

The main eating disorders are *anorexia nervosa*, *bulimia nervosa* and *binge eating*. At least 6 in 100 Western women have an eating disorder, with 1 in 100 having anorexia nervosa, at least 1 in 100 bulimia nervosa and about 4 in 100 binge-eating disorder.

Anorexia nervosa

Anorexia nervosa is a condition of obsessive desire for thinness through dieting, leading to extreme weight loss. There is a refusal to eat adequately and to have a normal body weight. The cause is unknown but a deep-seated emotional problem based on past experiences may be a significant factor.

Typical features of anorexia nervosa

- females—adolescents and young adults
- a refusal to eat
- poor body image
- intense fear of becoming fat
- loss of body fat
- loss of at least 15% of body weight
- no or very scant periods
- dry and scaly skin
- tendency to exercise obsessively
- high mortality rate

Who gets it?

It is a disorder of adolescent girls with an incidence of 1 in every 200 16-year-old school girls. It can affect young men. There are two common age groups when it comes on: 13–14 and 17–18.

About 40% of people with anorexia will later develop bulimia.

Bulimia nervosa

Known as 'binge-purge' syndrome, bulimia is recurrent episodes of binge eating in secret, followed by self-induced vomiting, fasting or the use of laxatives and fluid tablets (diuretics). The cause is unknown but is probably due to a deep-seated emotional problem.

Typical features of bulimia nervosa

- a disorder of young females
- begins later than anorexia nervosa—usually 17–25 years
- binges of high calorie, easily digested food
- fluctuations in body weight
- repeated attempts to lose weight
- irregular periods
- depressed mood with guilt after a binge
- a sense of lack of control during an eating episode
- excessive exercise

Risks

- complications of frequent vomiting, e.g. dental decay, salt and fluid loss

Binge-eating disorders

This is the eating of larger amounts of food than would a normal person in a given period. Some people may binge once a day while others many times a day. It is similar to bulimia except that self-induced vomiting and the use of laxatives to reduce weight does not occur.

Typical features of binge-eating disorders

- secretive and impulsive eating
- eating foods easy to swallow, high in calories and usually forbidden at other times
- most patients are obese
- eating episodes occur in the absence of hunger
- fear of loss of control
- binges triggered by feelings of sadness, anger, anxiety or paranoia
- binges average 2 days a week for 6 months

What is the management of eating disorders?

Early detection followed by action to help is the best approach. Problems with family relationships are often behind the disorder, so it is important to talk through any underlying problems such as a conflict or crisis at home, sexual abuse, physical abuse or drug dependency (including alcohol). Feelings of insecurity, rejection or guilt are common, so it is therapeutic to bring out these personal problems into the open. There is often a history of being teased at school about weight. People with eating disorders are usually very lonely people.

If there is severe anorexia nervosa (e.g. severe emaciation, risk of suicide), special care in hospital is needed. Patients need a balanced diet with at least 3000 calories a day for those with anorexia nervosa. An expert, such as a dietician, can educate the patient about an appropriate diet.

Encopresis

What is encopresis?

Encopresis is the involuntary passage of stool into the underwear (or a place other than the toilet) on a regular basis in a child over 4 years of age. Sometimes the child regularly starts soiling his or her underclothes, after having previously been well toilet trained. Children do not usually have complete bowel control until at least 2½ years of age. About 1–2 children in 100 have the problem and it is 3 times commoner in boys than in girls.

What are some of the features of encopresis?

- Bowel movements occur spontaneously into the underwear.
- The stools may be fully formed or partly formed.
- The soiling has to be present for at least 1 month.
- The child appears to have no control or warning.
- The abdomen may swell.
- Enuresis (bed-wetting) is often present.

Note: Diarrhoea has to be excluded.

What are the causes?

The commonest cause is constipation with false diarrhoea around the clogged up bowel. This may follow a period of resistance to or embarrassment about using toilets at kindergarten or school, on camping trips or outdoors. Rarely it may follow a bad experience visiting a school or other public toilet. School bullying can be a factor.

Sometimes the cause is not apparent. It may develop after a period of being too preoccupied with activities, resulting in bad habits with going to the toilet.

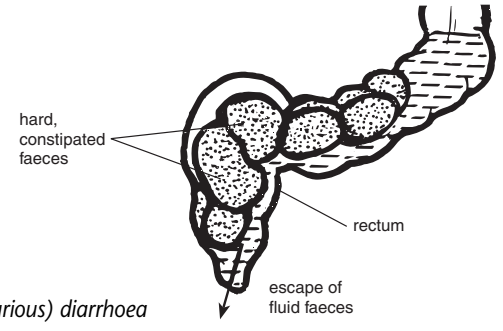
Some apparent causes are:

- a serious illness
- a poor diet, leading to constipation
- painful bowel movements (e.g. an anal fissure)
- stress or an emotional upset (e.g. parental separation)
- child abuse
- negative reaction to parents' obsession about toilet use

What is false (spurious) diarrhoea?

This is a trick played by the body. It occurs when after a period of constipation large amounts of hard faeces build up in the lower bowel and rectum. The fluid faeces from higher up tend to trickle past the obstruction and soil the underwear. The child is unaware of this and control has been lost because the usual anal reflex does not respond.

Parents often think their child has diarrhoea when the problem is really constipation. The doctor can diagnose it by examining the rectum.



False (spurious) diarrhoea

What is the management?

Role of parents

- A concerned, understanding and supportive approach is essential.
- Be sensitive to other stresses in your child's life.
- Do not shame or punish the child for 'dirty habits'.
- Ensure your child is not subject to any abuse.
- Approach toilet training sensibly—have realistic expectations. However, a structured toilet program may be advisable for your child; for example, regular sitting on the toilet for 5minutes 3 times a day (after each meal). A too strict or poorly supervised program does not work well.
- Provide a good normal diet with regular meals, and adequate fluids.

Bowel clean out program

Your doctor will advise on laxative medication required to restore the bowel to its normal state, especially if constipation with false diarrhoea is found to be present. Although the use of enemas and suppositories in a 3-day cycle seems severe, it is basically a gentle program, as follows:

Day 1 Microlax enema
Day 2 Rectal suppository
Day 3 Bowel stimulant laxative

The laxative is then continued each day. A lubricant or softener such as a paraffin oil preparation may be added. Encourage your child to follow the structured toilet routine (5 minutes, 3 times a day).

The above program may be repeated or laxative therapy continued until the problem settles. It usually requires supervision for at least 12 months. Sometimes referral to a special clinic may be necessary.

Other pointers for parents

- Get children 5 years and older to clean up themselves.
- Ask for the teacher's co-operation.
- Do not return to napkins.
- Do not allow siblings to tease the child.
- Provide incentives (e.g. time out with parents).

Remember

- Praise effort and success.
- Do not blame, shame or punish for accidents.
- Do not overreact.
- Check and correct any stresses.
- Seek the co-operation of all contacts.
- Provide a high-fibre diet with plenty of fluids.
- Establish good toilet habits.

Endometriosis

What is endometriosis?

The tissue lining your uterus (womb) is called the *endometrium*. Each menstrual cycle part of it grows and becomes engorged with blood and then is shed as a period. *Endometriosis* is a condition in which fragments of the endometrium grow in other places such as the wall of the uterus, the ovaries, the ligaments inside the pelvis, the Fallopian tubes and on other pelvic organs.

Each cycle, the blood from these fragments cannot escape because it is embedded in tissue in the pelvis. Small blood blisters develop and irritate the tissues.

There are many theories about the cause of endometriosis, but we do not fully understand how it comes about.

What are the symptoms?

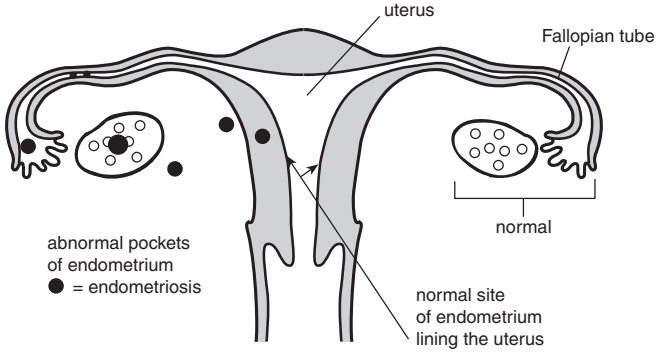
- painful or heavy periods
- a dragging pain in the back or pelvis or abdomen during periods
- pain during intercourse

You may have only one or two of these symptoms, and they can vary in severity from one person to another.

Many women with endometriosis have no symptoms at all, or have symptoms so mild that they pass unnoticed.

How common is endometriosis?

Endometriosis is a common problem, especially in its mild form. About 1 woman in 10 will have it to some degree, but only 1 in 100 will be affected by it. About 20% of women investigated for infertility will be diagnosed as having endometriosis.



Endometriosis

Who gets endometriosis?

It can occur between puberty and menopause in any woman and appears most often between the ages of 25 and 35. It is more common in women who have not had children. It is not known why endometriosis occurs in some women and not in others. It is more common in some families.

How is it diagnosed?

It is indicated by the symptoms, but the only accurate method of diagnosis is by directly seeing the condition with a small tube called a *laparoscope* passed through a small cut into the abdomen. The spots of endometriosis are seen as small red or black lumps.

What should be done?

If you are suffering from painful periods and other symptoms that suggest endometriosis you will be referred to a gynaecologist, who will probably perform a laparoscopy before making a firm diagnosis.

What are the risks?

Endometriosis is a common cause of infertility. It can cause painful cysts inside the pelvis, and can affect the ovaries or the uterus. An operation may be necessary to remove the cysts, repair the ovaries or remove the uterus, but these measures are not usually necessary.

What is the treatment?

Many women do not require treatment. If necessary, however, endometriosis can be treated with drugs or surgery or both.

Surgical treatment

The ovaries and womb are usually left intact but the endometrial tissue is destroyed by heat or laser and scar tissue is removed. The aim is to reduce symptoms and improve fertility.

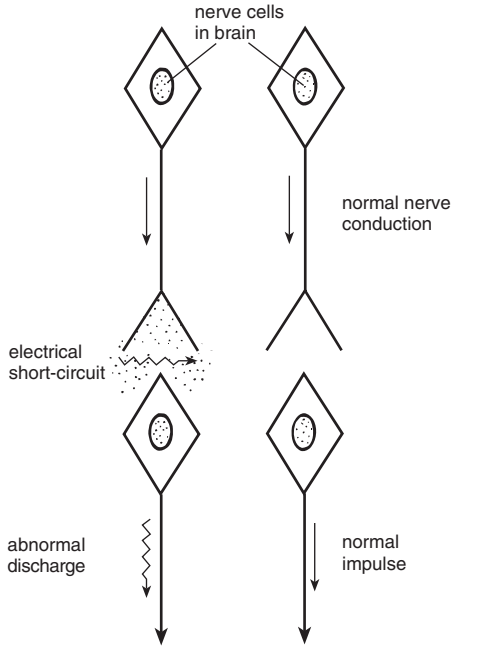
Medical treatment

Hormone treatment with one of the contraceptive pills, progestogens or danazol, aims to suppress the menstrual cycle, causing the endometrial cells to shrink and, hopefully, disappear. Hormones are usually taken for 6–12 months.

Epilepsy

What is epilepsy?

Epilepsy is a disorder that comes in various forms and shows up as a fault somewhere in the complex electrical circuits of the brain and nervous system. This minor fault results in the brain being unable to work properly for a brief period—the various symptoms depend on what part of the brain is affected.



In epilepsy there is a fault in the 'electrical' discharge of the cells

What are the symptoms?

Some people will experience convulsions (fits or seizures) while others have unusual sensations. Some children just stare for a brief period (absence seizures) or have sudden feelings of anxiety.

The convulsion

In this type of seizure, patients suddenly become unconscious and fall to the ground. Their bodies go stiff, and then may twitch or jerk briefly. The tongue may be bitten and the bladder usually empties. They then may be drowsy or sleep for half an hour or so. Such a convulsion usually causes no problems.

Dos and Don'ts for the onlooker

Don't:

- move the person (unless necessary for safety)
- force anything into the person's mouth
- try to stop the fit

Do:

- roll the person on to his or her side with the head turned to one side and chin up
- call for medical help if the convulsion lasts longer than 10 minutes or starts again

Note: The convulsion in itself will not cause death or brain damage.

What are the causes?

In most cases the cause is unknown and studies show that the brain appears normal in structure. However, it can be caused by damage from previous infections, scars from previous head injuries and, at times, tumours or problems relating to birth.

How common is it?

Epilepsy is common and affects about 1 person in 100. Both sexes are equally involved, and it seems to run in some families. Famous people who have had epilepsy include Julius Caesar, Agatha Christie, Thomas Edison and Handel.

What is the outlook?

Epilepsy can now be controlled to varying degrees by the careful use of medicine. Most patients can achieve complete control. Most people with epilepsy lead a normal life—they can expect to marry, have a normal sexual life and have normal children.

What about driving?

One has to be very careful about driving. However, most people with epilepsy can drive. The usual rule is that they can drive if they have not had a convulsion for a period of from 1 to 2 years.

What about employment?

People with epilepsy can hold down most jobs, but if liable to blackouts they should not work close to heavy machinery, in dangerous surroundings, at heights (such as climbing ladders) or near deep water. Careers are not available in some services, such as the police, military, aviation (pilot, traffic controller) or public transport (e.g. bus driver).

What about sport and leisure activities?

Most activities are fine, but people with epilepsy should avoid dangerous sports such as scuba diving, hang-gliding, parachuting, rock climbing, car racing and swimming alone, especially surfing.

What is the treatment?

It is important to have medical treatment to help lead a full and normal life. Tablets or capsules should be taken regularly. Regular checkups are needed to watch for any side effects of the medicine (usually minor) and to have blood tests to check the level of the drug in the blood. Quite often, once complete control has been established for several years, the medication can be gradually withdrawn and stopped.

Avoid trigger factors such as fatigue, physical exhaustion, stress, lack of sleep and excess alcohol. You must not drive if these factors apply to you. Take special care with open fires.

Establishing breastfeeding

There are three important things that you should know about breastfeeding:

1. positioning the baby on the breast
2. the 'let down'
3. supply and demand

Occasionally some women experience engorged breasts or insufficient milk supply until breastfeeding is fully established.

Positioning

Your posture

- Make yourself comfortable.
- Sit upright, but let your shoulders relax.
- Support yourself with cushions or a footstool, if necessary.

Your baby

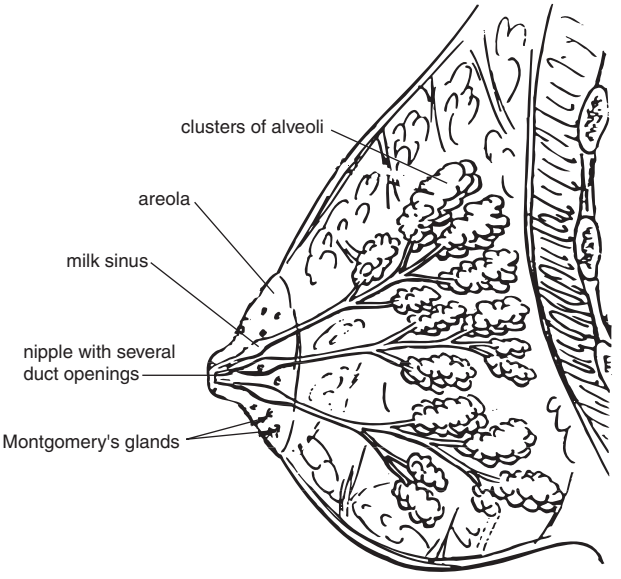
- Unwrap the baby's arms.
- Turn the baby's body towards yours.
- Have the baby's mouth at the same level as your nipple.
- Support the baby's body well.
- Hold the baby close to you.

Latching on

- Support your baby across the back of the shoulder.
- Tickle the baby's lips with your nipple until the mouth opens wide.
- Quickly move the baby on to the breast when the mouth is wide open. (Do not try to bring your breast to the baby.)
- Make sure the baby has a large mouthful of breast and not just the nipple. Aim your nipple at the top lip, so that the lower lip will be well below your nipple.
- The baby's tongue should be over the lower gum. (This is hard to see yourself.)
- If you feel the baby is not well positioned, slip your little finger into the corner of the mouth to break the suction, take the baby off and try again. You are both learning this, so take a few slow breaths and take your time.
- If you need to support your breast, use your four fingers under the breast, well away from the areola.

Let down

When your baby is feeding, the nerves in the nipple start a reflex action that allows the milk-producing alveoli to be squeezed, which pushes milk along the ducts towards the nipple. This is called the *'let down' reflex*. Some women notice a tingling or a pins-and-needles sensation or a fullness when this occurs. Others notice leaking from the other breast or nothing at all. You may notice that the baby changes from sucking quickly at the breast to a slower suck-swallow-suck-swallow pattern.



Anatomy of the breast

The milk higher up in the breast (the *hindmilk*) is rich in fat and calories. It is important that you have a 'let down', so that the baby does not get only foremilk.

If you are anxious, in pain, or embarrassed, your 'let down' may be slow. Eliminate these factors before feeding if you can. Once breastfeeding is well established, you will be able to breastfeed anywhere, but in the early days you need a supportive environment.

Supply and demand

Your breasts produce milk on the principle of supply and demand. This means that the more the breasts are emptied, the more milk is made. When breasts are allowed to remain full, they get the message to slow down milk production.

Your baby automatically controls his or her food intake by taking as much as needed. When the baby needs to increase your supply, he or she will feed more frequently for a couple of days.

If your supply is low, you can easily increase it by expressing milk after feeds. You can offer this milk to your baby after the next feed or in the evening. Usually your breasts will feel fuller after a few days of resting and expressing.

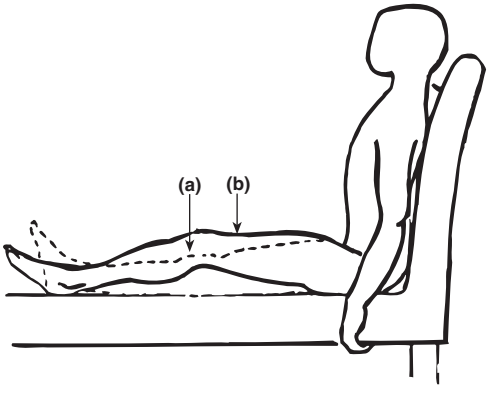
Exercises for your knee

These exercises are designed to help people who have weakness of their *quadriceps* muscle, which is often caused by any knee disability but especially by problems of the *patella* (kneecap). Following knee disorders, the knee joint muscles and the powerful quadriceps (used for walking, climbing and running) become weak; the joint can become unstable. If done regularly several times a day, the exercises will help the knee regain its normal strength and stability.

Exercise 1: Quadriceps tightener

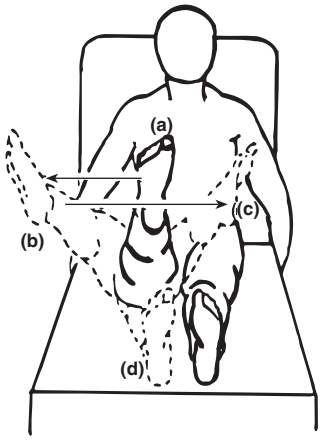
Sit upright on a couch with your legs stretched out straight in front. Slowly and deliberately tighten the thigh muscles by straightening the knee to position (a) from the relaxed position (b); brace the knee back hard. Count 2, and then relax the muscles completely. This should be done several times a day so that it becomes a habit.

Tightening the quadriceps can be done while you are standing or sitting.



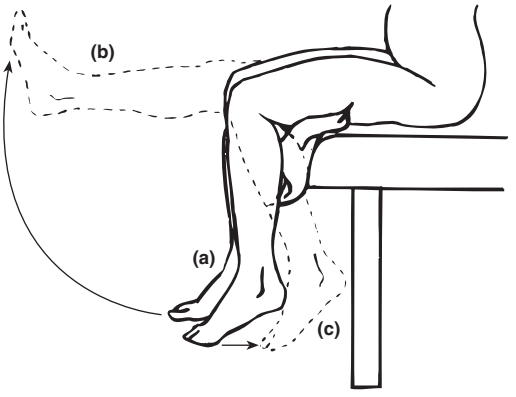
Exercise 2: Leg lifts

Starting from the same position as in exercise 1, brace the knees straight and then lift the whole leg upward (a), outward (b), across (c) and back to the resting position (d).



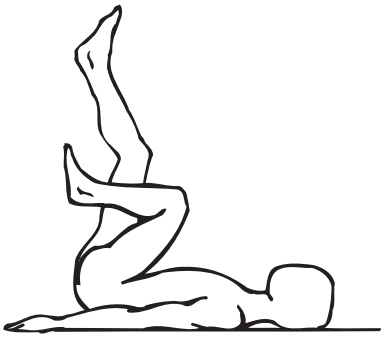
Exercise 3: Alternating leg pushes

Sit on the edge of the couch with a cushion under your knees and your legs hanging down (a). Straighten one knee firmly (b) and at the same time bend the other knee, pushing the calf hard against the couch (c). Slowly and deliberately change position so that the bent knee becomes straight and the other one pushes against the couch.



Exercise 4: Cycling exercise

Lie on your back with your hips and knees bent and make cycling movements with your legs. Elderly patients and anyone with lower back pain should be careful when doing this exercise. This exercise can be performed on a bicycle, preferably an exercise 'bicycle'.



Exercises for your lower back

Back exercises are extremely important because the muscles of the spine and abdomen support the spine better than any brace or corset. If you have chronic, nagging back pain, it is likely that performing these exercises religiously for 3 months will greatly reduce your back pain.

Exercises for the lumbar spine

The purpose of these exercises is to strengthen the various muscles that support the spine, especially the abdominal muscles and the extensor muscles of the spine.

Guidelines

- Do these exercises on a padded or well-carpeted floor.
- Do them at least twice a day for no less than 5 minutes at a time; once a day is better than not at all.
- Rest between each exercise.
- 2 or 3 of the 6 exercises is sufficient.
- Do not strain.
- The exercise may be uncomfortable at first, and initially each one should be repeated *only 2 or 3 times*.
- If there is any problematic pain with a particular exercise, stop doing it.

As the muscles stretch and strengthen, the routine becomes more natural and enjoyable.

Splinting the lumbar spine

It is a good idea to learn how to keep the lumbar spine in a fixed position by using the abdominal muscles and those around the spine.

- Lie face-up with one hand under your neck and your knees bent.
- Draw in your stomach firmly, and press your lumbar region against the floor by slightly raising your buttocks. Hold—count to 6—relax; repeat 10 times.

Note: Swimming is the ideal exercise for your back.

Exercise 1: Back arch

Stand up straight, feet pointing directly forwards and apart as wide as your shoulders, hands placed on the small of your back, fingers pointing backwards. Breathe in and breathe out slowly. As you breathe out, bend backwards as far as you can while supporting your back with your hands and keeping your knees straight. Hold your lower back arched for 5 seconds, then return to the neutral position. Repeat 5 times.

Exercise 2: Knee-to-chest raise

Lie flat on your back, bend one leg up, grasping it with your hand just below the knee, and bend your head forward so that your forehead approaches your knee. Hold for 5 seconds. Repeat on the other side.

Exercise 3: Straight-leg raise

Lie on your back. With your leg perfectly straight, raise it as high as you can. Repeat with the other leg. Take this to the limit of pain.

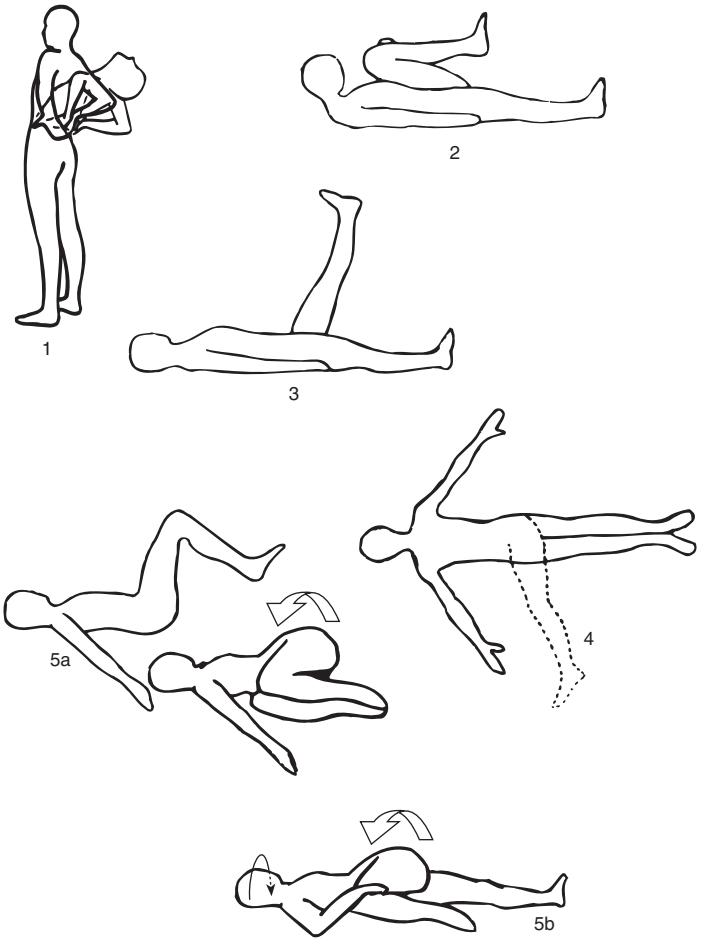
Exercise 4: Straight-leg swing

Lie on your back with your arms spread out on either side. Raise one leg as high as possible, keeping it straight. Swing the leg in an arc from one side to the other. It is important to swing the leg on the side of your back that you feel pain (if you have any). Hold for 5 seconds. Repeat 5 times.

Exercise 5a and b: Pelvic roll and one-sided stretch

5a You can get better results if someone pins your shoulders to the floor while you do this exercise. Lie on your back. Lift your legs together in the air and roll them from side to side. Hold for 5 seconds on each side. Repeat 5 times.

5b A better variation is to bend up the leg on your painful side and stretch it across your body while you turn your head to the opposite side. Use your hand to reinforce the stretch on your bent leg.



Exercises for your neck

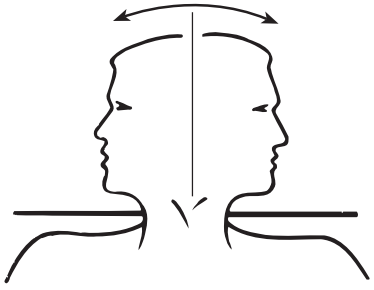
If you have neck pain and stiffness, a course of exercises is important because it loosens the stiff joints (all 35 of them) and strengthens the muscles that control the movements of the neck.

If there is any problematic pain with a particular exercise, you should stop doing it. It is best to keep your head in a neutral position with your chin tucked in before you start.

Do the exercises 2 or 3 times a day. Exercises 1 and 2 can also be done while sitting up, so that all the exercises (except 4) can be done anywhere (such as at the office or in the car when stopped in traffic).

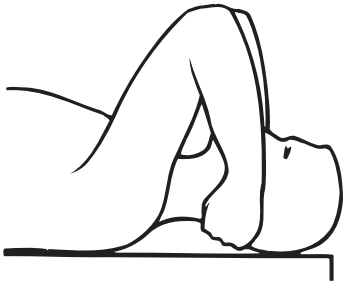
Exercise 1: Neck rotation

Lie on your back on a firm surface such as a floor or bed. Turn your head firmly (but not quickly) to the side by turning your chin towards your shoulders as far as you can. Hold for 3 seconds and then turn to the opposite side. Repeat 5 times.



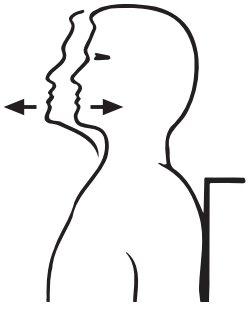
Exercise 2: Hand press

While lying on your back, lock your fingers behind your head and press your forearms against the sides of your head. Press your head down into the locked fingers. Relax. Repeat 5 times. This can be done while sitting upright.



Exercise 3: Bird exercise

Sit upright, tuck your chin in and then thrust it forwards and backwards in a bird-like manner. Repeat this 5 times.

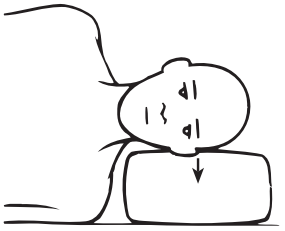


Exercise 4: Resisted side bending

Lie on your side with your head resting on a small, firm pillow. Your head and neck should be in a straight line. Take a deep breath in, hold it and push down hard on the pillow for 7 seconds, then breathe out as you relax. Repeat 3 times. Repeat on the opposite side if this side is tender.

It is important to make sure that you press down on your painful side.

This type of exercise can be used for flexion (lying face downwards), extension (lying on the back) and rotation (lying on the back).

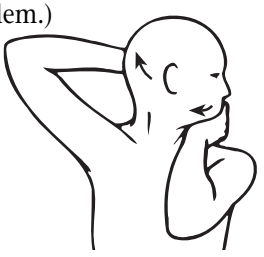


Exercise 5: Resisted side bending

Sit upright in a chair, tuck your chin in and keep your head straight. Place your right hand over the top of your head to grasp the head just above the ear (a left-sided problem is demonstrated) and reach behind your back with the other hand. Pull your head down until it first begins to feel uncomfortable. Take a deep breath in, hold it and press firmly against your hand for 7 seconds (you will be pushing to the left). Breathe out, relax and then pull your head firmly towards the right. Repeat this 3–5 times. (Reverse sides for a right-sided problem.)

Exercise 6: Resisted rotation

Sit upright in a chair, tuck your chin in and turn it to the left side to the point of discomfort. Then place your right hand on the back of your head and your left on the chin as shown (a left-sided problem is demonstrated). Take a deep breath in—now try to turn your head to the right but hold it in place by resistance from your hands. As you relax and breathe out, rotate your head firmly but gently towards the left. Repeat 3–5 times. (Reverse sides for a right-sided problem.)

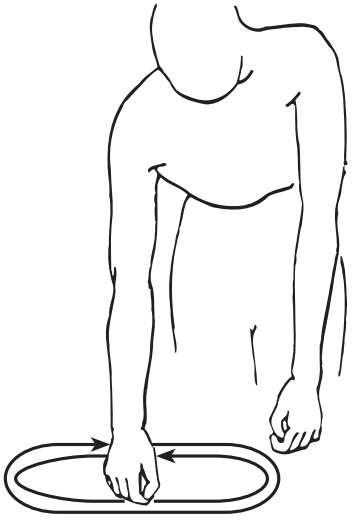


Exercises for your shoulder

A tender, restricted shoulder is caused by inflammation of the tendons and muscles controlling the shoulder or of the main joint. It recovers spontaneously but slowly. The pain subsides, leaving the joint stiff, but it will resolve gradually with use of the limb. These exercises are designed to help recovery.

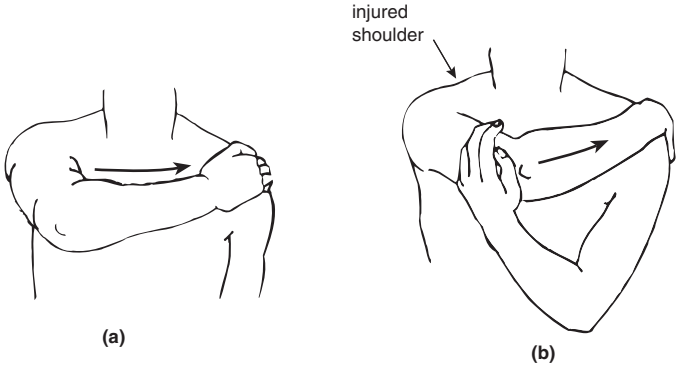
Exercise 1: Straight-arm rotation

Bend forwards and sideways. Let your arms hang down from your shoulders. Make circular movements clockwise and anticlockwise.



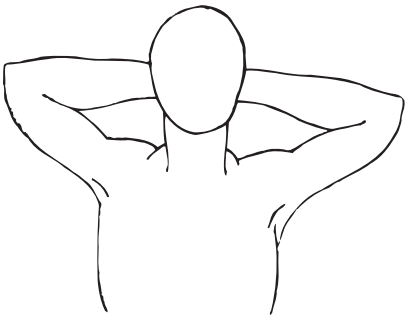
Exercise 2: Shoulder stretch

With the tips of your fingers touching your body, bring the hand of the affected arm across your chest until it reaches the opposite shoulder (a). With the other hand, gently press the elbow of the arm towards the shoulder (b).



Exercise 3: Shoulder winging

Lock your hands behind your head and brace back the elbows. You can do this while standing or lying on your back.

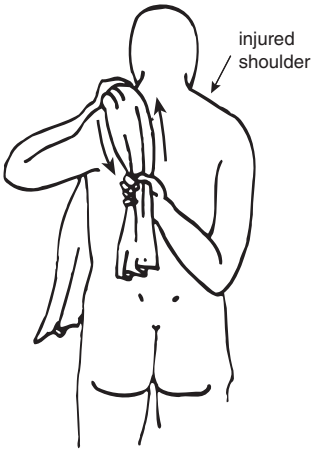


Exercise 4: Coupled armswing

Lie on your back and intertwine your fingers across the front of your body (a). Lift the affected arm with the 'good' arm to bring the hands up and over your head (b). Return the arms to the starting position (a), again carrying the weight of the affected arm with the other hand.

Exercise 5: Towel exercise

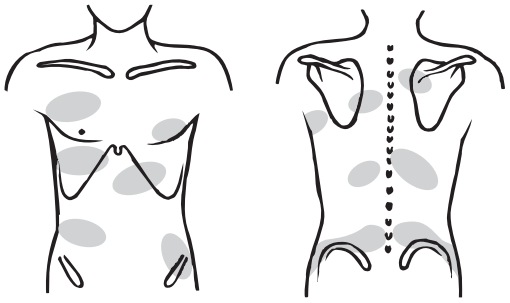
When the shoulder is recovering, the following exercise should be done. Put a towel over the normal shoulder and grasp the front end with the normal hand. Place the affected arm up the small of your back and grasp the other end of the towel with it. Make a seesaw movement as if drying your back.



Exercises for your thoracic spine

Pain in your thoracic spine

Pain in the *thoracic* (upper) area of the back is common in people who sit bent forwards for long periods, especially students and typists, and those who lift constantly (such as nursing mothers). The symptoms include pain between the shoulder blades (typically) and possibly difficulty in taking a deep breath. Sometimes the pain can be felt in the front of the chest.



Examples of pain distribution in the thoracic area

There appear to be two main causes:

1. chronic strain of the ligaments binding the vertebrae together due to poor posture
2. stiff or 'jammed' joints where the ribs join the spine—usually due to injury, including lifting and falls

How can it be prevented?

Maintain a good posture by doing the following:

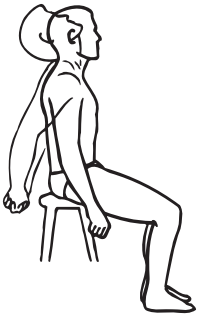
- Keep your head erect.
- Brace your shoulder blades together and then release—practise many times a day.
- Look after your posture at the office; have a good chair with a firm back support.

Exercises

Select at least 2 exercises that suit you and perform them once or twice a day for about 5 minutes.

Exercise 1: Shoulder brace

Brace the shoulder blades as you sit or stand, by swinging your clasped hands behind your back, extending your head back at the same time.

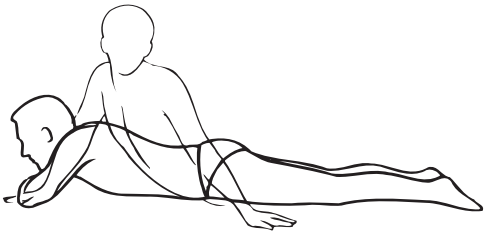


Exercise 2: Back arch

Lie face downwards. Lift your shoulders, hold for 10 seconds, then relax.

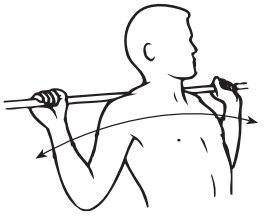
Exercise 3: 'Seal' movement

Lie face downwards. Lift from the waist, and rotate your upper trunk from side to side so that you feel a tight stretch in your back.



Exercise 4: Broom-handle stretch and swing

Place a long rod, such as a broom handle, behind your neck, grasp it as shown and rotate your body from side to side, reaching maximum stretch. This is the best exercise for your upper back.



Exercise 5: Knees-to-elbows back arch

Position your back like a cat, as illustrated (a). Support yourself on both knees and elbows. If you need to exercise the upper part of the spine, place your elbows forward and lower your chest (b). For the lower part of the back, perform the exercise on your hands and knees. Hunch your back as you breathe in, and then arch it as you fully breathe out.

(a)

(b)

Eye problems in the aged

Many older folk have no problems at all with their eyes and vision, with most maintaining good eyesight into their 80s.

However, natural physical changes can cause some problems with age, and disorders such as *cataracts* and *glaucoma* are more likely to occur. Older people generally need brighter light for everyday tasks such as reading, cooking, mending and driving a car.

Common eye complaints

Presbyopia

This is a common disorder first noticed after the age of 40 (usually 45 years onwards) when a change in the eye muscles and lens caused by loss of elasticity makes reading more difficult. You can read only by holding the material at arm's length. This applies to small print as in telephone books and street directories. It is a focusing problem, which is easily corrected by having reading glasses with a convex lens.

Every few years you will need slightly stronger spectacles to allow for decreasing ability to focus. Bifocal lenses may be needed if you have another eye problem.

Floaters

A common complaint is of seeing tiny spots or specks that float across the eye, especially in bright light. They are normal and usually harmless but may be a warning of impending eye problems. If they become more noticeable or cause flashes of light, report to your doctor.

Excessive tears

Excessive tears are usually a sign of increased sensitivity of the eyes to wind, light or temperature changes. This complaint is very common in a cold wind. It can be minimised by wearing glasses, especially sunglasses, in those conditions. However, it may indicate blocked tear ducts (*lacrimal ducts*) or an eye infection, and so an eye check is recommended.

Dry eyes

This is caused by a reduced production of tears by the tear glands. It can cause many problems, such as blurred vision, itching or burning. It is easily corrected by using artificial tears.

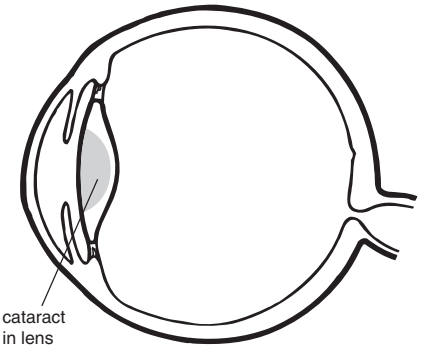
Common eye diseases

Glaucoma

Glaucoma is caused by too much fluid pressure in the eye, which can lead to blindness. It comes in two forms: the rarer *acute* form (which causes sudden pain and visual problems) and the common *chronic* form (which slowly develops without any early symptoms). It is important to have any unusual eye symptoms checked, and all elderly patients should have eye tests (including eyeball pressure) every 2–3 years. When detected, it can be treated and blindness prevented.

Cataracts

Normally the lens within the eye is clear and allows light to pass through it. A cataract is where the clear lens becomes cloudy or opaque and cuts down the light entering the back of the eye. Apart from deterioration of vision, there are no other symptoms. They can occur in anyone but are more common in diabetics and those taking cortisone as tablets or by inhalation. Cataracts can also run in families. They are diagnosed during an eye examination. A modern lens implant (an artificial lens placed in the space left by the cataract lens) can give excellent results.



Retinal disorders

Disorders of the *retina* (the photosensitive area of the eye) can lead to varying degrees of blindness. Diabetes and other diseases can cause retinal problems. Sometimes the retina can become detached and seriously affect your eyesight. Retinal detachment can be treated successfully if detected early.

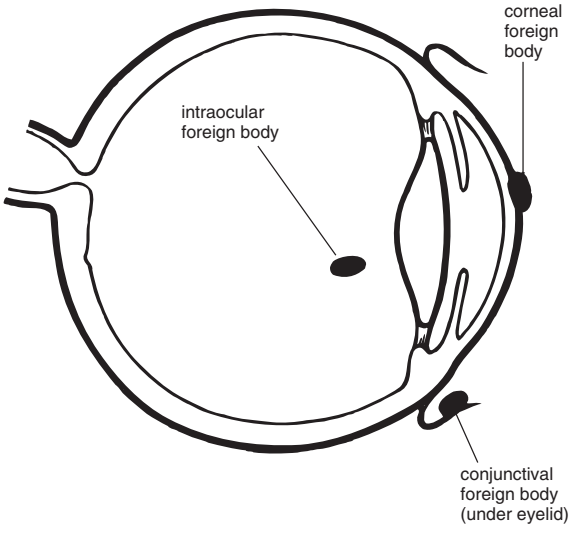
Tips

- Light bulbs are better than fluorescent lights.
- Have regular checks for blood pressure and diabetes.
- Have an eye examination every 2–3 years.
- Eye problems tend to run in families.

Eye: foreign body in the eye

What is a foreign body in the eye?

It is any particle such as dirt, metal or sawdust that lodges on the surface of the eye or inside the eye. The main causes are dust carried by wind, metal fragments from grinding, and wood particles from drilling or cutting.



What are the different types of foreign body?

- A *corneal foreign body* is on the clear surface of the eye.
- A *conjunctival foreign body* is on the skin of the eye, especially under the eyelids.
- An *intraocular foreign body* is inside the eye (a very serious problem).

What are the symptoms?

The main symptoms are eye pain or discomfort, watery eye, blurred vision, redness in the white of the eye and sensitivity to bright light. These may occur straightaway or, more commonly, after about 8 hours. The symptoms are usually worse for an intraocular foreign body, but can be surprisingly mild at first. If you are in doubt, it is better to err on the side of safety and go to your doctor.

Who gets foreign bodies in the eye?

Anyone can, although it tends to be commonest in young adults. Those at most risk are tradespeople such as boilermakers, woodcutters, fitters and turners, and labourers.

What are the dangers?

The biggest danger is an intraocular foreign body, which can be missed if not suspected. It is diagnosed by X-ray of the eye.

The main problem with metal on the cornea is rusting, which causes a dark spot on the clear part of the eye and can cause a scar, which affects vision.

Infection is a problem, especially if you use unsterile drops in the eye.

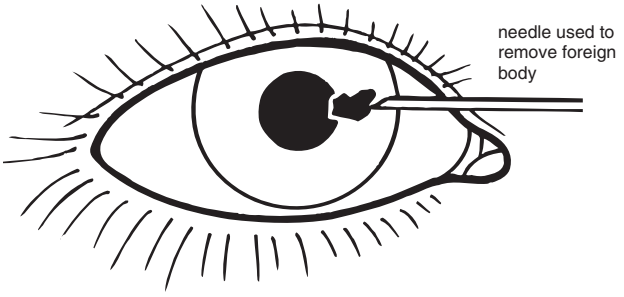
What should you do?

If you get a foreign body in your eye, go to your doctor as soon as possible. It is easier to remove and has less chance of rusting if you attend early.

What is the treatment?

The doctor will usually check your vision and examine your eyes. The foreign body will be located (however, sometimes it comes out before this but still feels as though it is in the eye). Since the eye is very sensitive to pain, the doctor will usually put some local anaesthetic drops into the eye to make removal comfortable.

The foreign body will be removed either with a cotton-wool bud or, if it is stuck in the cornea, with a needle.



What is the follow-up treatment?

If a metal foreign body has been removed from the cornea, some eye drops will be placed in the eye. The drops should be put in regularly as directed by your doctor.

Then an eye pad or patch will be placed over the eye. It is important to keep this pad on, because it allows the small defect in the cornea to heal. Once the local anaesthetic wears off (about 5 minutes), you will have some discomfort in the eye. This can be relieved by taking aspirin or paracetamol. You should not drive with an eye patch on.

You should come back for review as specified by your doctor.

The eye will not heal in less than 48 hours after removal of the foreign body.

How can foreign bodies be prevented from entering the eye?

Wear good eye protection, preferably close-fitting plastic eye glasses with protective sides. Do not walk or stand close to someone who is grinding or drilling. Have eye protection in a dusty, windy area.

Febrile convulsions

What are febrile convulsions?

Febrile convulsions are fits or seizures that occur in young children when they have a high fever (a fever greater than 38°C). A *convulsion* (fit) is a sudden event when the child is not 'quite with it', starts to jerk or twitch and may have difficulty in breathing.

What causes them?

They only occur when the child has a high temperature. The growing brains of little children are more sensitive to fever than are more mature brains, and when the normal brain activity is upset a fit can occur.

The fever is caused by an infection, which is usually a viral infection and often is not obvious. A simple viral infection that would give an adult a heavy cold is the type often responsible. Sometimes an infected ear or throat or bladder may be found by the doctor.

What is a rigor?

A *rigor* or a chill is an episode of uncontrolled shivering which lasts for 10–20 minutes. It may be associated with shaking and teeth chattering. A rigor is sometimes mistaken for a febrile convulsion.

Who gets febrile convulsions?

They are common and can affect any normal child. About 5 in every 100 children will have a fit from a fever. They tend to run in families.

They usually occur in children from 6 months to 3 years of age, the commonest age range being 9–20 months; they usually stop by 6 years of age.

What are the risks?

Febrile convulsions (whether one or several) in normal children do not usually cause brain damage or epilepsy. Most children are absolutely normal later on. One problem is that about 25 to 50% will go on to have another seizure.

How do you manage a convulsion?

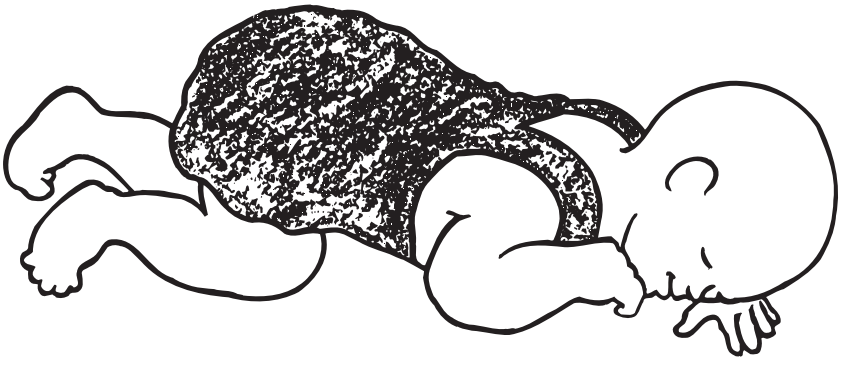
1. Place the child on his or her side, chest down, with the head turned to one side. Never lie a fitting or unconscious child on his or her back. Do not force anything into the child's mouth. The primary concern is to keep the child's airway open.
2. Undress the child to their singlet and underpants to keep them cool.
3. Obtain medical help as soon as possible. Ring or go to your local doctor or to your nearest hospital. Even if the fit stops, have your child checked.

How do you help prevent another episode?

Because some children have further febrile convulsions, it is important to manage any fever as soon as it is noticed. Undress the child down to singlet and underpants, keep the child cool, give fluids and paracetamol mixture.

Key points

- Febrile convulsions may occur again.
- They usually occur from 6 months to 3 years of age.
- They cause no long-term problems.
- They do not cause death, brain damage or epilepsy.
- They stop by 6 years of age.



The correct positioning of a child during a fit

Feeding your baby

Starting rules

- It is best to breastfeed for the first 12 months.
- Cow's milk-based formulas should be used if baby is not breastfed.
- Cow's milk should ideally be left until 12 months.
- In the first 3–4 months 'baby knows best'.
- Formula choice for healthy term infants can be based on cost.
- The only reliable measure of adequate nutrition is weight gain.
- Your baby only needs breast milk or formula for the first 5–6 months.
- It is good to introduce soft solid foods from 5–6 months but introduce them slowly.
- Babies don't need teeth to chew soft foods.

When to start solid foods?

Solids should be gradually introduced at about 5–6 months, one at a time. Food should never be forced but introduced slowly.

Solids should be offered after a feed or between feeds of milk. Breast milk or formula remains the most important food.

Examples of solid foods for beginners are:

- baby rice cereal mixed with their usual milk or cooled boiled water (best first option)
- cooked pumpkin, potato or carrot
- fruits such as banana, cooked apple or pear

The texture should be pureed (no lumps).

Introduce a new food only after 3–4 days, early in the day, and check for any allergic reaction. Start with 1–2 teaspoons of solids and build up to 3 meals a day at your baby's own pace.

6–9 months

Lumpy foods can be introduced at 6–9 months, as by this time babies learn to chew.

From 6 months you can introduce well-cooked meats which contain iron (beef, lamb and chicken) and fish but be sure to remove bones and gristle. The texture should be mashed or finely chopped.

Other foods:

- milk-based foods (e.g. custard, yoghurt)
- egg yolk (delay egg white until 9–12 months)
- lentils (e.g. baked beans)

Solids can be offered before a drink to develop a yearning for solids.

Note: Don't cook with salt or add sugar to fruit.

9–12 months

By 9 months more solids should be eaten each mealtime and the milk should be gradually decreased—3–4 breastfeeds or 600 to 800 mL of formula is sufficient.

Encourage baby to drink from a cup rather than a bottle—a spouted cup can be used. Baby is ready for a spoon and can feed themselves.

You can now introduce wheat products such as pasta, bread, baby muesli and other cereals, cheese and egg (unless there is a family history of allergy). Baby is also ready for finger foods as they learn to chew, so encourage their handling of food; for example, rusks, bread squares, finger sandwiches, fruit pieces, cheese sticks, cooked meat (lamb, beef, ham, chicken, fish). Introduce minced or mashed foods to encourage chewing.

Cooled boiled water should be introduced as it is better than fruit juices and cordials.

12 months onwards

You can now introduce cow's milk and more solid foods especially meats, vegetables and fruit.

Cautionary advice

Choking

Be careful—avoid nuts, whole peas, popcorn, raw and uncooked pieces of hard fruits and vegetables (e.g. apples and carrots).

Always supervise your baby when eating, especially up to 12 months.

Cow's milk

Cow's milk should not become a main drink until 12 months of age. Babies on a cow's milk diet who eat little are prone to develop iron deficiency anaemia (seen often from 12 to 36 months). If cow's milk is used before 9 months it should be brought to the boil and cooled before use. Milk intolerance develops in some babies.

Allergies

Be alert for allergic reactions usually seen with cow's milk, egg, soy beans, peanuts and fish. Symptoms include flushing, blotchy skin, swelling of the face, pallor and wheezing soon after eating. Diarrhoea and abdominal colic also indicates intolerance. Consult your doctor if you are concerned.

Honey

Avoid honey for babies under 12 months as it may contain bacteria.

Reference

http://www.chw.edu.au (fact sheets)

Fever

What is fever?

Fever is present when the temperature of the body (measured inside the mouth) rises above 37.2°C in the morning and above 37.8°C later in the day. The normal body temperature is up to 37°C. Most fevers are due to an infection in the body and are an important part of the body's defence against infection. Fever is usually caused by a virus but sometimes by bacteria. The temperature returns to normal when the infection settles.

Fever in children

Fever is common in children, in whom the temperature may rise quickly to 38.5°C or higher. It does not mean the child has a serious illness. It is normal for children, especially infants and toddlers, to have at least 5 or 6 episodes of fever a year.

Note: teething does not cause fever.

When is fever harmful?

Fever itself is not harmful until it reaches a level of 41.5°C. This level is very uncommon in children.

Extremely high temperatures are often due to human error, for example:

- shutting a child in a car on a hot day
- overwrapping a febrile child

One complication is a febrile convulsion in a child between 6 months and 5 years of age.

The most common complication is dehydration so drinking lots of fluids is important.

Management of fever

Adults

- Do not overheat with too many clothes or blankets.
- Drink a lot of light fluids, especially water.
- Take aspirin or paracetamol tablets for relief.
- Fan or sponge the patient if the fever is severe.
- Seek medical attention for the following:
  — severe headache or neck stiffness
  — twitching, shaking or convulsions
  — excessive drowsiness
  — signs or symptoms that worry you

Children

- Dress the child in light clothing.
- Do not overheat with too many clothes, rugs or blankets.
- Keep the child cool, but avoid draughts.
- Give the child small drinks of light fluids, especially water, often. Do not worry if the child will not eat.
- Give paracetamol syrup every 4 hours until the temperature settles.
- Sponging with lukewarm water for up to 30 minutes will help especially if paracetamol is taken.
- Give the child plenty of tender loving care, with reassurance that they will soon feel well.

Note: Cooling measures such as completely undressing the child and using fans are not necessary.

Seek immediate medical help for the following:

- severe headache or neck pain (with stiffness)
- light hurting the eyes
- repeated vomiting
- a convulsion or the child acting 'odd'
- undue drowsiness or difficulty waking up
- refusal to drink
- the child looking sicker
- no improvement in 48 hours
- earache or other pain

Key points

- Fevers fight infection.
- Fevers are common in children.
- Give them paracetamol mixture every 4 hours.
- Keep them cool.
- Keep up fluids.

Fibromyalgia

What is fibromyalgia?

Fibromyalgia is a chronic pain disorder affecting the soft tissues of the body (muscles, muscle coverings and ligaments) over a widespread area from the neck to the knees. In the past it has been called fibrositis and soft tissue rheumatism. A feature of this rather puzzling condition is that it is chronic, meaning that it lasts for at least 3 months and usually on and off for years.

What is the cause?

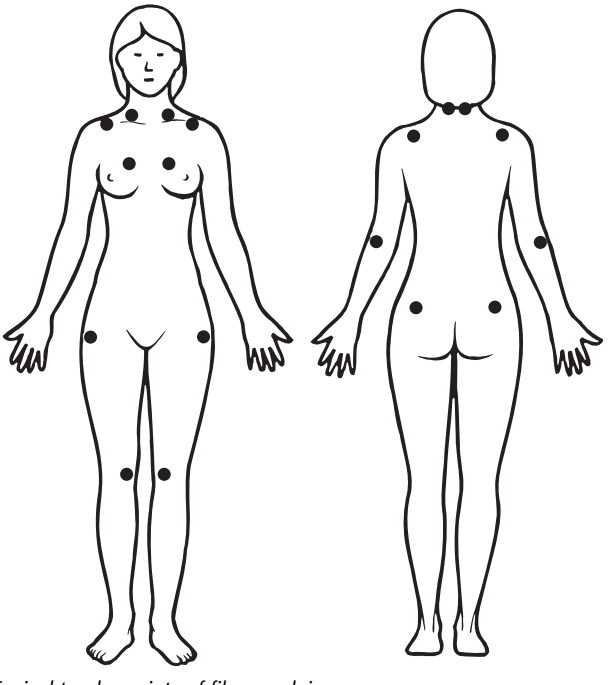
The cause of fibromyalgia is unknown. What is known is that certain chemical substances produced in the central nervous system circulate to the soft tissues and make them very sensitive to sensations of pain. There is no hidden serious disease, injury or other damage that causes the problem. There may be a genetic predisposition.

Who gets fibromyalgia?

It occurs in all types of people. It usually appears in adults between the ages of 30 and 60, particularly in people in their 30s and 40s. It is 6 times more common in females than in males.

What are the usual symptoms?

- aches and pains in the areas shown, especially of the neck, shoulders and back
- stiffness in these areas
- tenderness over spots in these areas, called 'trigger points', which are sensitive to touch
- fatigue
- sleeping difficulties
- emotional reactions to the problem



Typical tender points of fibromyalgia

Note: The degree of pain varies from person to person and for an individual can vary from day to day.

What are the aggravating factors?

- stress
- fatigue and overwork
- exposure to dampness and cold
- excessive activity

What is the outlook?

Despite the severity or length of the discomfort, the problem always has the potential to settle down. Spontaneous recovery occurs in some people. Others tend to have flare-ups with periods of feeling well on and off for a long time, even years. Fibromyalgia, although uncomfortable, is not life threatening. A good way for a patient to cope with it is to consider it rather like tinnitus (constant ringing in the ears) of the muscles, which is there in the background but not so noticeable when one keeps busily occupied and distracted with interesting things.

What is the treatment?

There are many treatments available, but no special magic one. The goal of treatment is self-management. It is advisable to avoid multiple treatments, especially physical treatments that do not give significant relief.

Self-help

Try to understand what aggravates the problem (such as stress, emotion, heavy activity, tiredness) and avoid these factors. Try other strategies that may suit you. Examples are:

- heat such as hot baths and showers, heat packs or compresses
- relaxation techniques
- pleasant distractions
- an exercise program—exercise is very important
- a posture-related program, e.g. yoga, tai chi
- hydrotherapy

There is no proven, special diet but avoid substances that interfere with sleep such as caffeine and alcohol.

Support programs

Most people are helped by a relaxation program and also a supervised rehabilitation exercise program including walking, swimming and cycling. There are experienced therapists who can help. It is very helpful to join a fibromyalgia support group.

Medication

There is no single drug for fibromyalgia but there is a variety of drugs that can help some people on an individual basis. Your doctor may give you a trial on one of these.

Flat feet

Flat feet in children

Flat feet due to low arches are common and usually quite normal in children. In fact, all newborn children have flat feet. They are also common in pre-school children and present in about 10% of teenagers. It is normal for parents to be very concerned but there is usually nothing to worry about. Children have low arches because they are loose-jointed and flexible so that the arch moulds to a flattened position when standing.

What usually happens with time?

When the child starts walking, he or she develops a wide stance for balance and the feet roll at the ankles. This is normal. With growth, the muscles of the ankle develop and become strong so that the foot gradually takes shape and about 80% of children will develop a medial arch by their sixth birthday.

What are the symptoms?

The typical flat foot that is flexible causes no symptoms, even in adult life. Very rarely, it may be stiff and uncomfortable and require treatment.

What is the tiptoe test?

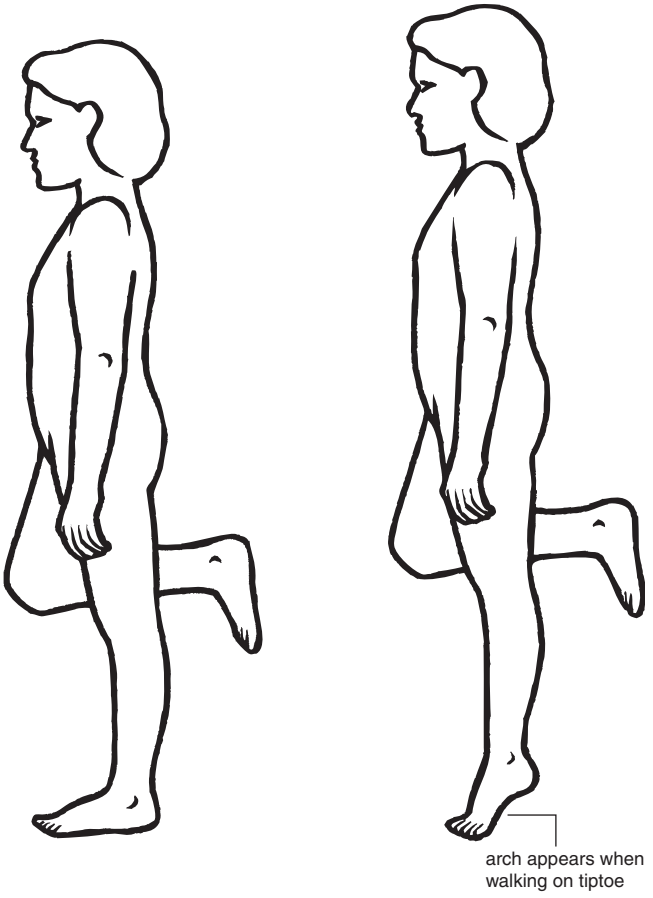
This is a simple test for the presence of an arch. The arch can be seen better when the feet are hanging in the air and even better still when the child stands on tiptoes.

Are flat feet hereditary?

Yes: there is a tendency for foot shape to be genetically determined. If one or both parents have low arches, their children tend to have low arches.

Do special shoe inserts help?

Studies in California have shown no benefit for 'flat feet' from wearing orthoses or other forms of arch supports. Arches develop naturally and these inserts do not help them at all. Special modified shoes, splints, massage and other treatments have not been proved to help the feet develop any better.



The tiptoe test

What about shoes?

Special shoes are not needed. Avoid tight shoes but get shoes that are good quality and that are comfortable, flexible and protective. They should allow freedom of movement and space to grow. Boots have no advantage over shoes. If a child develops excessive wearing of the inner side of the shoes, obtain shoes that have a stiffer heel and some in-built arch support. An experienced shoe retailer can give good advice about this but remember that special orthotic inserts and treatments are rarely needed.

6 Men's health

Foreskin hygiene

The normal foreskin in infants and children does not need special care and should not be forcibly retracted for cleaning from birth to 5 years of age. As a rule the foreskin will retract when it is ready and it should only be retracted by its owner.

Why is foreskin hygiene important?

If you have a foreskin, you owe it to yourself to practise correct hygiene because the failure to do this can result in an unpleasant smell, soreness, irritation and infection. Poor hygiene is associated with a greater risk of getting cancer of the penis and possibly with sexually transmitted diseases. A man who neglects his foreskin may end up with a smelly and sore penis that could affect his sex life, for it will be obvious to his partner.

It is important to retract the foreskin and wash all of the area at least once a week. All males should practise proper hygiene from the age of 6 or 7.

Foreskin hygiene is very simple!

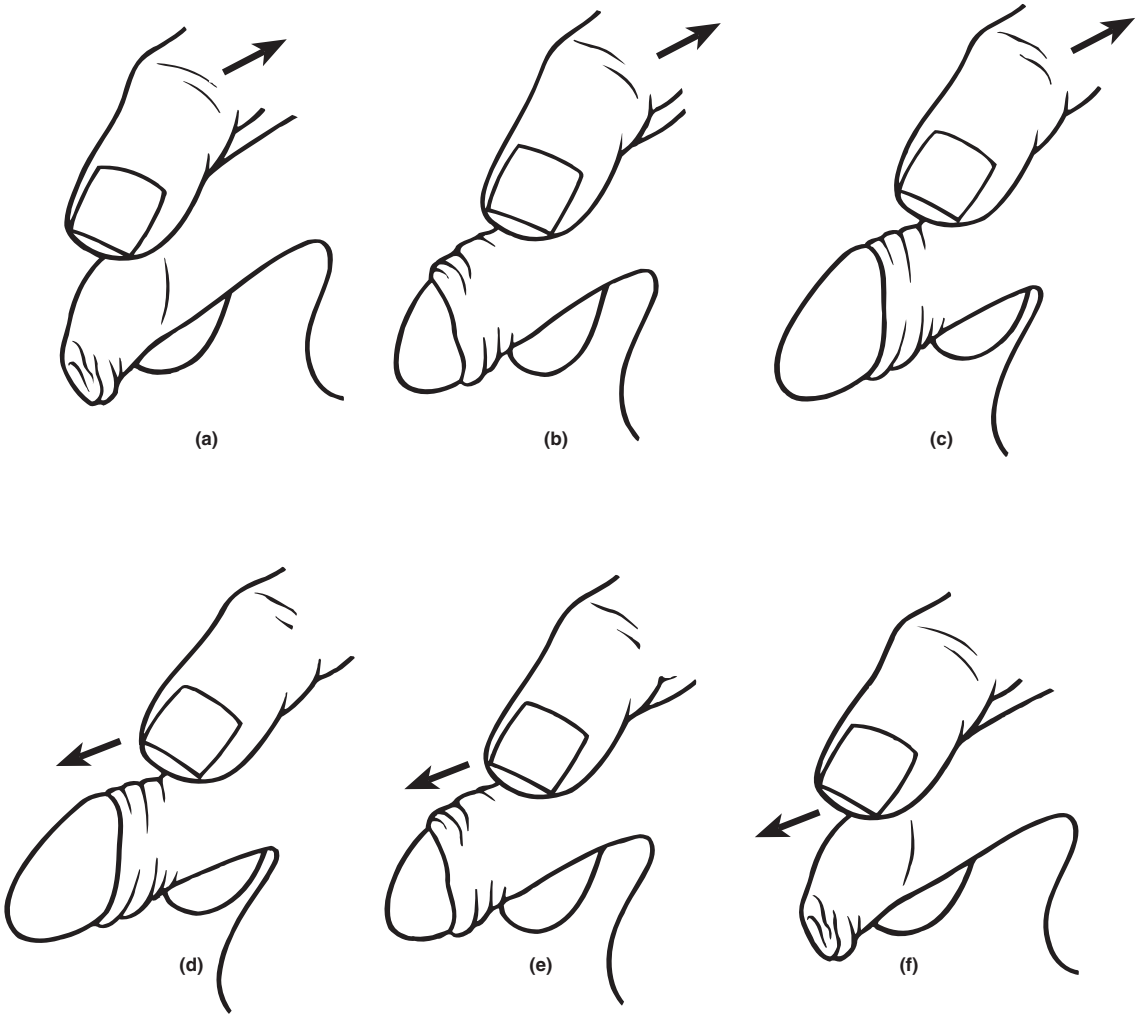
When you have your shower or bath, follow these steps:

1. Slide your foreskin back towards your body (diagrams (a)–(c)). A male older than 5 years should be able to slide his foreskin back. If you cannot, check with your doctor.
2. Wash the end of your penis and foreskin with soap and water. (Do not let soap get in the opening—it stings!)
3. After your shower or bath, *dry* the end of your penis and foreskin properly and *replace* the foreskin (diagrams (d)–(f)).

Do not forget to replace the foreskin, or it could get trapped back and cause unpleasant problems.

Also, when you urinate, slide the foreskin back just enough so that the urine does not get on the foreskin—this helps to keep it clean.

Do not forget—if you have any problems, see your doctor.



Cleaning the foreskin

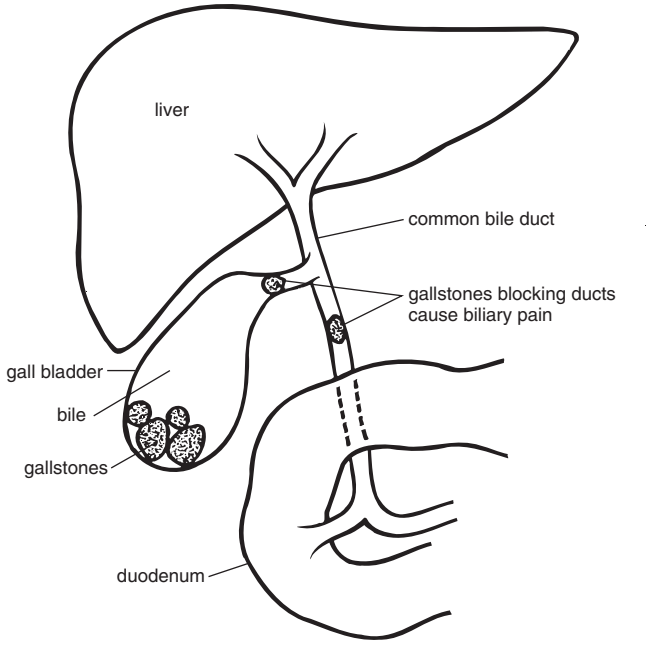
Gallstones

What are gallstones?

Gallstones are small, hard stones that develop in the gall bladder in a similar way to which pearls grow inside oyster shells. They usually vary in size from that of a grape seed to the size of a marble.

How are they formed?

The gall bladder is a small bag about the size of a fig that collects *bile*—a green liquid produced by the liver. A small bit of sediment in the bile can act as a collecting spot for more sediment and cause it to gradually grow into a stone.



What are the symptoms?

About one-half of people with gallstones do not get any pain because the gallstones simply lie out of the way in the bottom of the gall bladder.

The rest suffer very severe pain, which builds up to a peak over a few hours and then fades. This *biliary pain* is usually felt in the upper abdomen on the right side just under the ribs. It can be felt in the back or middle of the abdomen. Nausea and vomiting often accompany the pain but these symptoms may be a clue that accompanying infection (*cholecystitis*) has developed.

What causes the pain?

The pain is caused by the gallstones getting jammed in the *cystic duct* or the *common bile duct*. This leads to raised pressure in the hollow tube from the build-up of bile.

The pain is relieved if the gallstone is pushed forwards into the duodenum or if it falls back into the gall bladder.

Who gets gallstones?

Almost anyone, including children, can grow gallstones. About 1 or 2 in every 10 adults in Western society has 1 or more gallstones. The problem increases with age, so that 1 in 3 elderly people have gallstones. It is related to a diet high in fats. There is an old medical saying that the typical patient suffering from gallstones is 'female, fair, fat and forty'. This is a reasonably accurate picture.

What are the risks?

Gallstones are capable of causing unpleasant complications such as inflammation of the gall bladder and bile ducts, jaundice and acute pancreatitis. Jaundice is caused by the stones remaining stuck in the common bile duct and stopping the flow of bile to the duodenum.

How are gallstones detected?

Gallstones can be detected by having an ultrasound examination, which is simple, safe and painless, or by a special X-ray called a *cholecystogram*.

What is the treatment?

Self-help

Diet is very important. Avoid overeating and eating fatty foods, or any foods that may bring on attacks of biliary pain. A sensible low-fat diet usually keeps the problem under control.

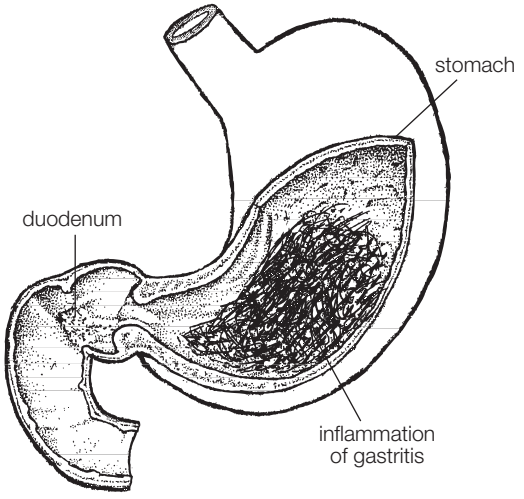
Medical help

Strong pain-killers are needed to relieve the attacks. Sometimes the stones can be dissolved by a special chemical or shattered with special shock waves, but most troublesome gallstones need to be removed by surgery. This usually involves removing the gall bladder and its stones and, if necessary, removing stones from the bile duct. The usual modern-day operation is percutaneous cholecystectomy using a laparoscope. It is a type of 'key-hole' operation in which the gall bladder and stones are removed through the scope. Patients are usually able to leave hospital after 1–2 days.

Gastritis

What is gastritis?

Gastritis is inflammation of the mucus membrane lining the wall of the stomach. It is caused by various germs especially viruses, irritating chemicals including various drugs, foods that 'disagree' or overeating. It may have an acute (sudden) onset and be short-lived, or be chronic with a slow onset and persistence.



What are the symptoms?

The symptoms of viral gastritis are similar to those of viral gastroenteritis except that vomiting is more pronounced than diarrhoea. A common symptom is a burning discomfort felt in the upper abdomen and lower chest, similar to indigestion especially if it is due to excessive alcohol or eating of the wrong foods. Other symptoms include nausea, anorexia (loss of appetite), belching and acid reflux.

What are the causes?

The inflammation is caused by infection of the stomach lining by viruses (mainly) or bacteria. Gastritis is also part of a group of disorders that cause erosion and gastric ulcers. The germ *Helicobacter pylori* has been shown to be an important cause of these disorders.

The following factors are associated with gastritis:

- aspirin and anti-inflammatory drugs
- alcohol
- smoking
- caffeine drinks
- overeating
- foods that don't digest easily
- extreme stress/overwork
- illness
- trauma (e.g. burns, severe injury)

How common is the problem?

Gastritis is very common and almost everyone has an occasional bout of gastritis. It is rare that epigastric discomfort, nausea and vomiting caused by gastritis alone last longer than one or two days. Such cases are suggestive of a viral cause. Symptoms may persist if you drink large amounts of alcohol and smoke.

What are the risks?

It is generally a mild illness and quick recovery follows. One complication is an erosion (ulceration) of the stomach wall that may result in vomiting blood. This rather alarming development requires urgent attention. If vomiting is profuse you have to be careful about getting dehydrated.

What is the treatment?

Treating the attack

- Avoid eating solid food during the first 24 hours.
- After 24 hours eat foods that agree with you.
- Take frequent amounts of non-alcoholic fluid such as water and milk.
- Avoid hot, fatty and spicy foods.
- Take an antacid preparation, preferably a liquid one.

Medical help

- For persisting discomfort your doctor may prescribe an anti-emetic (to stop vomiting) and a special type of antacid.
- If the problem persists or you have a complication such as bleeding or an ulcer your doctor may organise a test for the bacterial germ *Helicobacter pylori* and a gastroscopy procedure to look directly into the stomach.
- Special treatment is available for *H. pylori* if it is present.

Prevention and self-help

Examine your lifestyle and whether you abuse your stomach from excessive drinking, improper eating especially 'fast' or irritating foods, smoking, fast living and stress. Commonsense living and moderation in all factors will help prevent attacks. Avoid taking excessive painkillers or taking aspirin and caffeine preparations.

When to seek medical help

- prolonged vomiting
- very severe pain
- signs of dehydration such as excessive thirst and scanty urination
- vomiting blood or 'coffee grounds'-type vomitus
- black or tarry bowel movements

Gastroenteritis in children

What is gastroenteritis?

It is an infection of the bowel that causes diarrhoea and sometimes vomiting. It is very common in young children and is mainly caused by viruses.

How is it caught?

The viruses can be easily picked up from other people who may have immunity but pass on the infection. Bacteria, usually on contaminated food and often spread by flies, can also cause the problem.

What are the symptoms?

- diarrhoea—frequent, loose, watery, greenish motions
- vomiting—usually early on
- abdominal pain—colicky pain may be present
- crying—due to pain, hunger, thirst or nausea
- bleeding—uncommon but sometimes seen in motions
- fever—sometimes present
- anal soreness

What is the outcome?

The vomiting usually settles in a day or so. The diarrhoea may last for up to 10 days, but usually lasts only 2 or 3 days.

What are the problems?

The serious problems are loss of water (dehydration) and loss of minerals such as sodium chloride and potassium. The younger the child, the greater the danger. The main cause is persistent vomiting.

What are the danger signs?

The danger signs are listlessness, difficulty in waking up, sunken eyes, very dry skin and tongue, pallor, and passing scanty or no urine. If these signs are present, contact your doctor without delay. Your child may need admission to hospital.

What is the treatment?

There is no special drug treatment for this problem. The inflamed bowel needs rest, and the body must have water and glucose.

Day 1

Give fluids a little at a time and often (e.g. 50 mL every 15 minutes if vomiting a lot). A good method is to give 200mL (about 1 cup) of fluid every time a watery stool is passed or a big vomit occurs.

The ideal fluid is Gastrolyte, New Repalyte or WHO-recommended oral rehydration preparations. These are all glucose and mineral powders that you can obtain from your pharmacist and make up according to the directions on the packet. Alternative fluids are:

- lemonade (not low-calorie) 1 part to 6 parts water
- sucrose (table sugar) 1 teaspoon to 120 mL water
- glucose 1 teaspoon to 120 mL water
- cordials (not low-calorie) 1 part to 16 parts water
- fruit juice 1 part to 4 parts water

Note: Children can suck suitable iceblocks. One preparation is Hydralyte, which is available at your pharmacy.

Warning: Do *not* use straight lemonade or mix up Gastrolyte with lemonade or fluids other than water.

Days 2 and 3

Reintroduce your baby's usual milk or formula diluted to half strength (i.e. mix equal quantities of milk or formula and water).

Do not worry that your child is not eating food. Solids can be commenced after 24 hours. Start with bread, plain biscuits, jelly, stewed apple, rice, porridge or non-fat potato chips. Avoid fatty foods, fried foods, raw vegetables and fruit, and wholegrain bread.

Day 4

Increase milk to normal strength and gradually reintroduce the usual diet.

Breastfeeding

If your baby is not vomiting, continue breastfeeding but offer extra fluids (preferably Gastrolyte) between feeds. If vomiting is a problem, express breast milk for the time being while you follow the oral fluid program.

Exclusion

Gastroenteritis is very infective so children should be excluded from others until 24 hours from the last bout of diarrhoea or vomiting.

Rules to follow for diarrhoea and vomiting

- Loss of fluids must be corrected first.
- Give small amounts of fluid often.
- Start bottle feeds after 24 hours.
- Continue breastfeeding.
- Start solids after 24 hours.
- Maintain good hygiene—the problem is infectious.

Consult your doctor if:

- diarrhoea is profuse, e.g. 8–10 watery stools
- vomiting persists
- any of the danger signs are present
- severe abdominal pain develops
- diarrhoea persists or recurs with introduction of milk

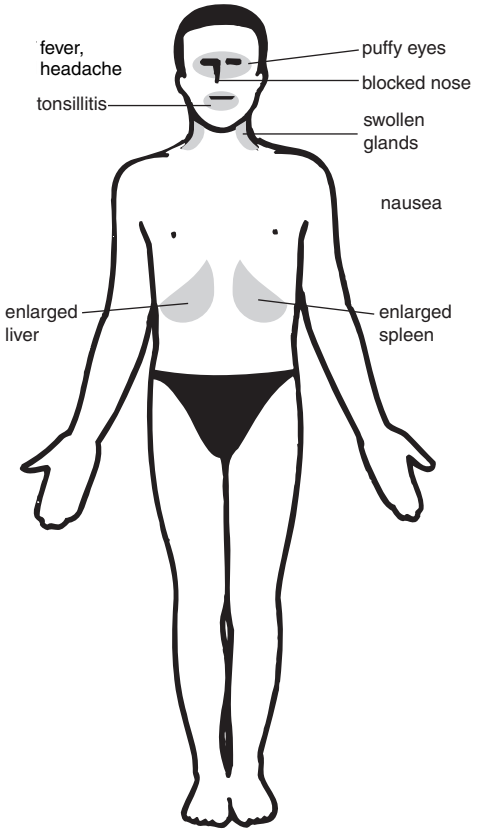
Glandular fever

What is glandular fever?

Glandular fever (properly known as *Epstein–Barr mononucleosis*) is a viral infection that causes an illness similar to influenza. It is sometimes called 'the kissing disease' because it was observed to be passed from one person to another through the mouth. It is also transmitted by coughing and sharing food. The virus spreads through the bloodstream and the lymphatic system, causing the spleen, liver and lymph glands to swell as well as causing a fever (hence the term 'glandular fever').

What are the symptoms?

The symptoms are similar to those of the flu: fever, headache, blocked nose, nausea, mouth breathing, sore throat (you may have tonsillitis) and a general sense of feeling 'out of sorts'. The patient may be aware of having swollen, tender glands (lymph nodes) in the neck, armpits and groin. Less common symptoms include a rash and jaundice.



Symptoms of glandular fever

How is it diagnosed?

The best way to diagnose the illness is for a blood test to be done. The blood shows abnormal cells (called *monocytes*) under the microscope, hence the name *mononucleosis*.

How long does it last?

The major symptoms usually disappear within 2 or 3 weeks, but for a further period of at least 2 weeks you may feel weak, lacking in energy and depressed. Occasionally the lethargy can last for months.

How common is the problem?

It is probably more common than realised, because many cases are mild and pass unnoticed or are simply mistaken for a mild attack of influenza. This applies particularly to children. Children and young adults are the most likely to catch the virus, but the disease is usually seen in the 15- to 25-year-old age group.

What are the risks?

It is not a dangerous disease, but can make you feel extremely sick if it causes hepatitis. It can lead to chronic fatigue for several months. You may have a relapse during the course of the first year after contracting it. However, it eventually settles completely and the body returns to normal.

What is the treatment?

Because glandular fever is a viral infection, antibiotics will not help. The illness must simply run its course.

Dos:

- take paracetamol (in modest doses) to relieve discomfort or pain but not if the liver is affected
- rest (the best treatment), preferably at home and indoors
- drink plenty of fluids such as water and fruit juices
- gargle soluble aspirin or 30% glucose to soothe the throat

Don'ts:

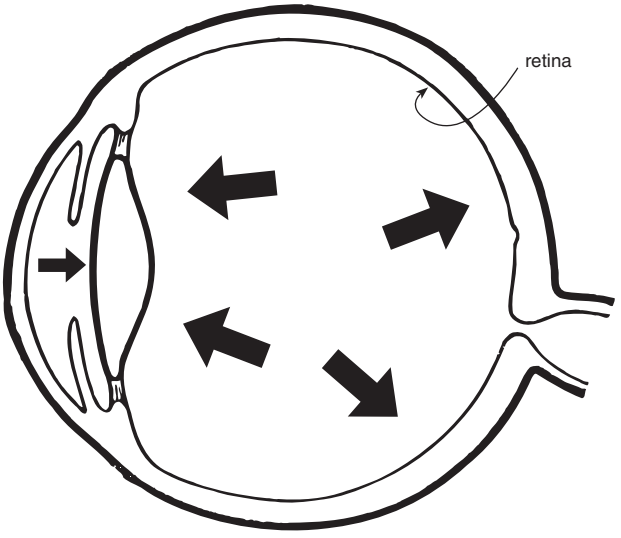
- drink alcohol or eat fatty foods
- push yourself to perform tasks
- attempt to return to your normal daily routine until advised to do so by your doctor (about 4 weeks after the illness starts)
- participate in contact sports until at least 4 weeks after complete recovery

Finally, it is common to feel depressed during the illness and in the recovery phase because you may feel tired and lethargic. Report any such problems to your doctor.

Glaucoma

What is glaucoma?

Glaucoma is a common eye disorder caused by increased fluid pressure within the eyeball. This high pressure can damage the delicate blood vessels and nerve fibres in the eye. The pressure in this watery fluid builds up because the drainage system gets blocked. Glaucoma, which runs in families, is the second commonest cause of blindness in Australia.



Increased fluid pressure in the eye

What are the two types of glaucoma?

1. *Acute glaucoma*: This develops suddenly and painfully.
2. *Chronic glaucoma*: This is the common type, which develops slowly and may not be noticed by the patient.

What are the symptoms?

Acute glaucoma

Blurred or foggy vision, rainbow halos around lights, pain (may be severe) in the eye, nausea and vomiting, a red eye.

Chronic glaucoma

Loss of side vision at first, gradually increasing to partial or total blindness.

How common is it and who gets it?

Anyone at any age can get glaucoma, but the older you are the more likely you are to get it. Most people are over 40 years when it comes on. Those over 65 are at greater risk, with 1 person in 20 being affected and 1 in 10 at 75 years.

What are the risks?

Blindness is the end result without treatment. If detected early, it can be cured.

How is it diagnosed?

It is detected by routine examination of the eye and by a special instrument being placed on the surface of the eye to measure the pressure of the fluid in the eyeball. It is a simple and painless test that is usually done as a routine screening test by doctors, especially eye specialists.

How can it be picked up early?

Visit your doctor when you suspect eye trouble such as:

- frequent changes of glasses that are unhelpful
- blurred or fogged vision
- loss of side vision
- recurrent pain
- inability to adjust eyes to a darkened room
- coloured halos around lights

Have regular eye examinations (e.g. everyone over 35 should have routine tests and in particular those over 60 should have glaucoma tests every 2–3 years). If you have a close relative with glaucoma, you should have yearly inspections.

What is the treatment?

Special eye drops are usually used to treat glaucoma. Oral medications, laser treatments and sometimes surgery are used also. The eye drops are instilled 2–4 times a day and will have to be taken for life.

Remember

- Glaucoma is common.
- It causes blindness.
- It can be treated successfully.
- It may be symptomless at first.
- Always have unusual eye problems checked.

Gonorrhoea

What is gonorrhoea?

Gonorrhoea (also known as 'the clap') is a sexually transmitted infection (STI) caused by the bacterium *Neisseria gonorrhoeae*. It commonly affects the urethra, especially in men, and other genital areas but may also develop in the anus or throat, depending on the sexual activity.

What are the symptoms?

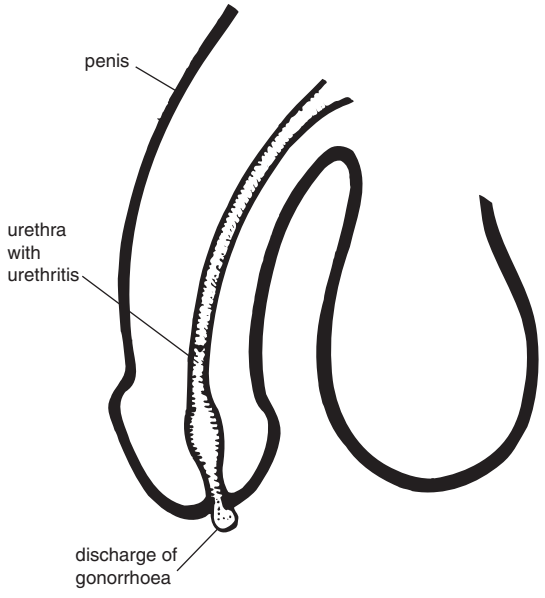
The symptoms usually appear about 2–10 days after vaginal, anal or oral sex, but the incubation period can be as long as 3 weeks.

In men

The main symptoms (due to urethritis) are:

- a burning sensation on passing urine
- a pus-like (white or yellow) discharge or leak

The first noticeable symptom is a slight discomfort on passing urine, which can later become very painful 'like passing razor blades' if it is not treated. A discharge of creamy pus from the tip of the penis follows. Sometimes there is no discharge, just pain, and sometimes there are no symptoms at all.



Gonorrhoea in men

In women

In women gonorrhoea often causes no symptoms but can produce vaginal discharge or pain on passing urine. If it produces pelvic inflammatory disease (PID) it can cause:

- pain and tenderness deep in the pelvis
- lower abdominal pain and tenderness
- fever, an unwell feeling and painful periods
- pain on intercourse

In both sexes

Gonorrhoea of the anus and throat may have no symptoms or soreness. There may be a discharge (a feeling of dampness) around the anus.

Gonorrhoea is diagnosed by taking special swabs from the infected areas or testing the first passed specimen of urine.

How is gonorrhoea spread?

It is spread through vaginal and anal intercourse and oral sex, whether homosexual or heterosexual, where one partner is already infected.

What are the risks?

- It can cause PID in women, sometimes leading to infertility.
- It can cause infection in the joints.
- In men it can infect the testicles and also may cause a urethral stricture (narrowing of the urethra).

What is the treatment?

You must see your doctor or go to an STI clinic. Gonorrhoea is treated with a single dose or course of antibiotics (by tablets, capsules or injection, depending on where you picked up the infection and on the test results). It is cured in about 2 weeks.

Sexual partners should be tested, even if they have no symptoms, and even if a checkup has failed to detect the infection.

Sexual intercourse must be avoided until the infection has cleared up (both you and your partner).

How is gonorrhoea prevented?

Using condoms for vaginal, anal and oral sex provides good protection. Sexually active men and women (especially those at risk, e.g. those with multiple partners) should have regular checks (at least annually).

Important points

- Gonorrhoea may cause no symptoms, especially in women.
- It can cause infertility in women (and less commonly in men).
- It is readily treated by antibiotics.
- All sexual partners need to be informed and treated.
- Sexual intercourse should be avoided until the infection is cleared.
- Condoms provide protection.

Gout

What is gout?

Gout is a type of arthritis that is caused by uric acid crystals getting caught in the spaces between the joints of the feet, the hands and some larger joints. The tissue around the joints becomes inflamed, and this inflammation triggers the sensitive nerve endings at the joint, causing extreme pain.

Uric acid is a waste product from the body, especially from proteins called *purines*. It is passed out in the urine by the kidneys, which sometimes cannot cope with the load of uric acid, and this causes a build-up in the body.

Typical sites of pain in gout

What are the symptoms?

The main symptom is severe pain, usually in the hands or feet, especially at the base of the big toe. Sometimes gout can strike in other joints, such as the elbow or the knee.

The pain usually comes on without warning, often in the early hours of the morning, and soon the joint becomes so tender that one cannot bear even the weight of the bedsheets. The inflamed skin over the joint is often red, shiny and dry. The first attack usually involves only one joint and may last from a few hours to several days, generally about 2 or 3 days depending on how soon treatment is commenced. Sometimes there may be only one attack in a person's lifetime.

Who gets gout?

Almost any person can get gout, because all human beings produce about as much uric acid as the kidneys can handle. However, it does appear to be hereditary and is far more common in men, especially between the ages of 30 and 60.

It is one of the oldest disorders known to humans, and some well-known victims include Alexander the Great, Kublai Khan, Michelangelo, Martin Luther, Isaac Newton, Henry VIII, John Wesley, Francis Bacon and Benjamin Franklin.

What brings on gout?

Contrary to popular belief, it is not necessarily brought on by high living and gluttony. Overindulgence in rich foods and alcohol can certainly bring on an acute attack in those who are prone to gout. It is associated with obesity and high blood pressure. Some drugs, particularly diuretics (fluid tablets), injury, surgery or starvation can bring on gout but alcohol is the main factor.

What are the risks?

Gout is a curable disease, but if it is untreated it can cause kidney disease, including kidney stones.

What is the treatment?

The acute attack

The earlier the attack is treated the better. Contact your doctor about the best treatment and the right pain-killer. Aspirin is not recommended for the pain of gout.

Bed rest is important. Some relief can be obtained by applying a hot compress or ice to the affected joint. Keep the weight of the bedclothes off the foot by placing a bed cradle or similar object under the bedclothes.

Since gout may strike only once, no further treatment is needed apart from following the 'rules of moderation'. If gout keeps returning, it will be necessary to go onto tablets that may have to be taken for a lifetime in order to prevent more acute attacks.

Rules of moderation

Do:

- restrict intake of food high in purines, especially organ meats (liver, brain, kidneys, sweetbread), shellfish and tinned fish (sardines, anchovies, herrings)
- reduce your intake of alcohol
- eat a normal, well-balanced diet
- drink plenty of water
- maintain a normal weight, but avoid 'crash' diets
- wear comfortable shoes
- get regular exercise

Don't:

- take your worries to bed
- exercise too strenuously
- overexpose yourself to cold
- drink excessive amounts of alcohol (keep to a modest level only, e.g. 2 standard drinks a day)

Dry skin

Dry skin is a common problem, especially in people with *atopic dermatitis* (*eczema*). It is rough, scaly skin that is dry to touch and less elastic than normal skin. Some people describe it as feeling like sandpaper. It is especially common in cold, dry climates.

What causes dry skin?

The main feature is a lack of water or moisture in the skin surface. It also appears to be caused by a relative lack of natural oils. However, the main problem is insufficient water to moisturise the skin.

What are the effects of dry skin?

It is not a serious medical problem. One of the worst irritating effects is itching. Cracking of the skin (particularly of the legs) can occur in older people, especially in winter. People often complain of a 'crawling' sensation in the skin. Dry skin does *not* cause wrinkles.

What makes dry skin worse?

- too much washing and bathing (too long and too often)
- use of very hot water
- use of traditional alkali soaps
- cold weather
- low humidity and artificial heating
- dry air
- overexposure to wind and cold
- poor diet

What is the treatment?

Washing and bathing

It is important not to have frequent long baths or showers. Reduce the number and length of baths and showers. It is probably better to avoid baths, swimming in pools and bathing in spa baths. Concentrate on having short showers and perhaps at times have the so-called APC (armpit and crutch) scrub with soap and water instead of a shower or bath.

Use tepid water instead of hot water.

Bath oils

The addition of oils to baths helps to seal in moisture in the skin. However, you must be careful not to slip getting in and out of the tub, as bath oils make the tub surface slippery.

Soaps

Avoid using the traditional alkali soaps and harsh soaps. Use soap substitutes such as Dove, Neutrogena or Cetaphil lotion. Less expensive soaps such as oatmeal soap, which are readily obtained from health shops, can also be used.

After showering

After you shower, do not rub hard with a towel but pat dry and then rub a bath oil or mild baby oil into the skin.

Clothing

Avoid wearing wool next to the skin. Do not wear heavy woollen clothing. Wear cotton clothing.

Skin softeners and lubricants

Apart from various mineral oils and Vaseline Intensive Care, preparations that soften, lubricate and soothe the skin include QV skin lotion, Alpha Keri lotion and Nutra-D cream.

Moisturisers

Although skin softeners act as moisturisers, the urea-based moisturisers can help make the skin more soft and supple. Examples are Nutraplus, Calmurid, Redmin sorbolene, Vitamin E and glycerine lotion, and Aquacare HP. Another suitable moisturising agent is QV cream.

Diet

Eat a well-balanced diet. Drink ample water during the day.

Key points

- Dry skin lacks surface moisture.
- Avoid excessive bathing and showering.
- Take shorter and cooler showers.
- Apply skin softener or moisturiser after showering.
- Use soap substitutes.
- Avoid wool and heavy clothing next to skin.
- Avoid overheating and dryness in rooms.
- Follow a good diet.
- Drink plenty of water.

Haemochromatosis

What is haemochromatosis?

It is a condition where too much iron accumulates in the tissues of the body. Iron is an important element especially for the quality of our blood but excess is harmful. The normal levels of iron in the body are about 3 grams in women and 4 grams in men. In haemochromatosis, the level rises to over 20 grams.

What is the cause?

The main cause is a hereditary disorder in some people who have altered controls on particular genes (chromosomes), causing the body to absorb too much iron from the gut and thus overload the tissues and organs of the body. Secondary or acquired causes develop where there is an overload of iron from such things as too much iron in the diet from iron tablets, many blood transfusions and thalassaemia.

Who gets haemochromatosis?

The hereditary form which is common can affect anybody and affects both men and women. It is mainly a problem affecting Anglo-Saxons and usually only affects people from middle age onwards. About 1 in 8 people carry a single gene related to the disorder—these people are referred to as heterozygous or carriers and do not have the disorder. However, about 1 in 200 people are homozygous; that is, they have double genes. These people can have the disorder to a variable extent—some go throughout life without being aware they have a problem while others can have serious symptoms.

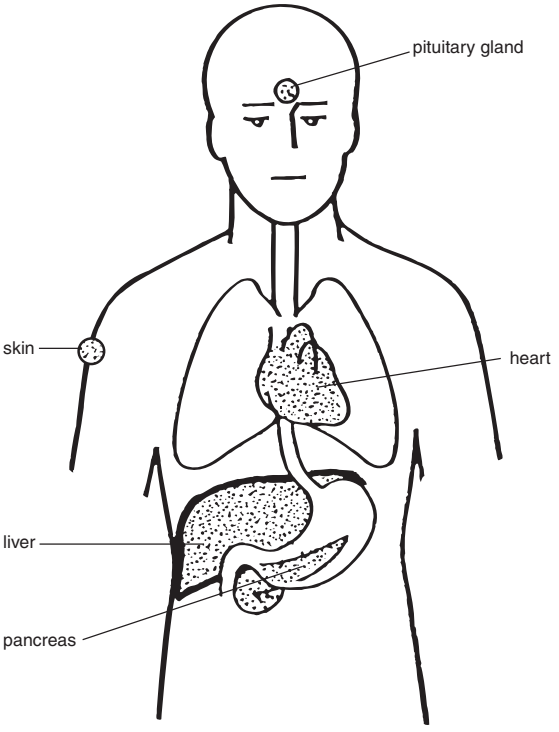
In a city the size of Sydney there would be about 15 000 people affected by the disorder while about 400 000 would be carrying only one haemochromatosis gene (HFE gene).

What are the symptoms?

The commonest symptom is tiredness or fatigue, which can be extreme. This is due to the overload of iron. Other symptoms may include painful joints, upper stomach discomfort, loss of sex drive or the symptoms of diabetes such as excessive thirst and passing excessive urine. Most patients do not develop their first symptoms until aged between 30 and 60 years. However, some homozygous people may show no or only mild symptoms. The skin may become discoloured, giving a bronzed or leaden grey appearance.

What are the risks?

If the condition is not diagnosed early, the overload of iron can accumulate in organs, particularly the liver (causing cirrhosis), the pancreas (leading to diabetes), the heart (causing heart dysfunction) and the pituitary gland (leading to loss of libido and impotence). Some of these problems are life threatening, hence the importance of early diagnosis. Those with abnormal liver tests will require a liver biopsy.



Organs of the body affected by too much iron

What tests can be done?

There are basically two types of blood tests:

- iron levels especially transferrin saturation
- chromosome tests—the HFE gene

The genetic test informs us who are normal, homozygous (have the disorder) or heterozygous (carriers).

Who should be screened?

First-degree relatives of people with known haemochromatosis should be screened with iron studies of the blood. Genetic screening is now available to them (covered by Medicare) and is helpful in genetic counselling as it gives information about who are carriers or who are completely free of the affected genes; this is most reassuring for members of affected families.

What is the treatment?

For those affected with high iron levels, about half a litre of blood is removed weekly until the blood iron level is normal. This may take about 2 years in some people. Then the blood is taken every 3–4 months for the rest of their life to maintain a normal iron level.

Patients can have a normal diet. Vitamin C supplements can increase iron absorption and should be avoided. Carriers require no treatment.

What is the life expectancy?

This is normal if diagnosed and treated before cirrhosis of the liver or diabetes develop.

Haemorrhoids

What are haemorrhoids (piles)?

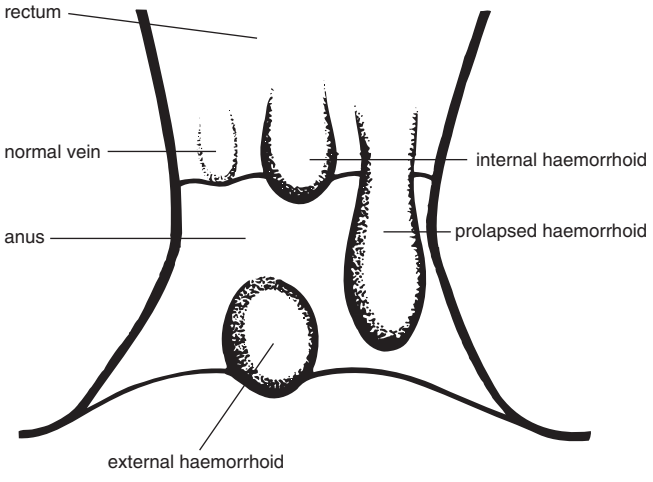
They are knobbly varicose veins of the rectal or anal area, which can prolapse outside the anus and hang as small grape-like lumps.

What are the different kinds of haemorrhoids?

Internal haemorrhoids are those that form inside the rectum near the beginning of the anus. They are generally not painful and often are only noticed when they bleed.

Prolapsed haemorrhoids are internal haemorrhoids that protrude through the anus when the stool is passed or when a person stands or walks. They are usually painful.

External haemorrhoids are small, painful haemorrhages under the skin around the anus. They form a hard clot after 24 hours. Their proper medical name is *perianal haematoma*. When they settle, they sometimes leave a small skin tag.



Haemorrhoids

What causes haemorrhoids?

The commonest cause is constipation, mainly due to the excessive straining at toilet because of hard faeces. Some experts say that sitting on the toilet for long periods causes haemorrhoids, but this problem is related to constipation.

It is important to get into the habit of answering the 'call of nature'. The problem tends to run in families. Other associations are heavy manual work, sitting for long periods (such as bus driving) and pregnancy.

How common is the problem?

Haemorrhoids are common and tend to develop between the ages of 20 and 50. About 1 out of 4 Westerners suffer from them at some stage of life.

What are the symptoms?

Bleeding is the main and in many people the only symptom. The word *haemorrhoid* means 'flow of blood'. The blood is bright red and appears when you defecate. You may notice it as streaks on toilet paper or in the faeces.

Piles often cause a mucous discharge and itching around the anus. Any consequent scratching makes the irritation worse.

What are the risks?

Haemorrhoids are not dangerous, but continuous bleeding may result in anaemia. Any bleeding from the anus, especially in someone over the age of 40, should be reported to your doctor. Occasionally the bleeding attributed to haemorrhoids can come from cancer of the bowel.

What is the treatment?

The best treatment is prevention, and softish bulky faeces that pass easily prevent haemorrhoids. Train yourself to have a diet with adequate fibre by eating plenty of fresh fruit, vegetables, and wholegrain cereals or bran.

Try to complete your bowel action within a few minutes and avoid using laxatives.

If you have haemorrhoids, clean yourself thoroughly but gently after each bowel action (using soft toilet paper and soapy water) and dry yourself carefully.

Special astringent ointments or suppositories (advised by your doctor) may relieve the congestion and shrink the haemorrhoids. Mild cases may clear up completely.

If the problem persists, your doctor may advise injections or minor surgery. Occasionally surgery to remove the piles—called *haemorrhoidectomy*—may be the only answer.

Hair loss in women

What is hair loss?

Hair loss or *alopecia* is a problem of great concern to all those who experience it. In many women a gradual but slight widespread thinning of the hair starts in adult life. It is basically a natural process and should not be regarded as abnormal. About 50% of women have significant hair loss by the age of 60. This is a male pattern baldness called *androgenetic alopecia* because it is under the influence of male hormones (androgens).

Facts about normal hair growth and loss

- Hair is continually produced and shed at the same time.
- About 50–100 hairs are shed daily without a reduction in hair thickness.
- Every hair on the scalp is shed and replaced every 3–5 years.
- At least 25% of hair must be shed before there is a noticeable loss of thickness.
- Significant hair loss tends to block the shower drain or be visible all over the pillow.

What are the causes of abnormal hair loss?

In general terms the basic causes are genetic (hereditary) factors, hormonal factors, stress, illness and drugs. Specific causes are:

- *androgenetic alopecia* (common baldness)
- *alopecia areata*
- *chronic traction alopecia—overtight hair style*
- *diffuse alopecia*, due to:
  — drugs, or
  — *telogen effluvium*

Androgenetic alopecia in women

Women also produce androgens but the hair loss pattern is slower and different to men. Diffuse thinning occurs, usually on the top of the head (the crown). The front hairline usually remains but in some women this can recede. Although hair loss can appear in men and women as early as their 20s, it may not appear before the age of 50 in women. Some women notice a short period of considerable hair loss but this may settle down to a long period of no loss. Androgenetic alopecia may be unmasked after an episode of diffuse loss such as occurs after childbirth or a severe illness. Total loss of hair rarely occurs in women.

Treatment is somewhat controversial and needs to be discussed with your doctor.

Alopecia areata

This is a disorder of the hair follicle that causes complete hair loss in patches leaving a smooth, clean, normal scalp or other hairy area. A smaller localised patch will usually recover spontaneously within 12 months, though some may not. Alopecia areata can cover an extensive area and rarely it may cover the whole scalp (*alopecia totalis*), even the eyelids or eyebrows when recovery is unlikely.

Diffuse alopecia

Telogen effluvium

This complex term stands for diffuse shedding of hair. It can be triggered by a variety of stressful conditions after which it takes about 2–4 months for the hair loss to occur. In this disorder up to 50% loss is common so perceptible thinning will be noticed. Patients usually complain of large clumps of hairs with white bulbs coming out with gentle tugging on combing or shampooing—this can exceed 150 hairs a day compared with the normal average of 50–100 hairs. The classic precipitating event is childbirth when the hair thins about 3 months later. Others include any severe stress, high fever, weight loss especially crash dieting, trauma from surgery or an accident, malnutrition, ceasing the pill and certain illnesses.

People can be reassured that spontaneous recovery is usually expected in about 6 months. If stress factors are corrected and recovery is poor, topical minoxidil for a minimum of 4 months can be used.

Chronic telogen effluvium

This condition occurs usually in menopausal and postmenopausal women. There may be an episode of dramatic hair shedding that recovers but recurs weeks to months later and lasts up to several days. Fortunately it does not result in obvious balding—it is self-limiting and does not need treatment.

Drug-induced alopecia

Drugs are a very important cause of alopecia. Those that cause telogen effluvium include cytotoxics (cancer chemotherapy), anticoagulants (warfarin, heparin), antithyroid drugs, antiepileptics and various hormones.

General comments on treatment

Medications

There are several drugs available that can slow down or prevent further hair loss. With these treatments most women will notice a reduction in hair loss and some will notice hair regrowth but normal regrowth is exceptional. The medications are expensive and need to be used for the rest of one's life if a good response occurs. You can discuss these medications with your doctor.

Physical treatments

Other treatments include the use of wigs, hair transplantation and camouflage. Wigs can be worn on the whole head or on a bald spot, or fibres can be interwoven with the remaining hairs. You can discuss hairdressing experts about camouflage.

Halitosis

What is halitosis?

Halitosis is unpleasant smelling or 'bad' breath. It is common in healthy people, especially in the morning when they first awaken from sleep.

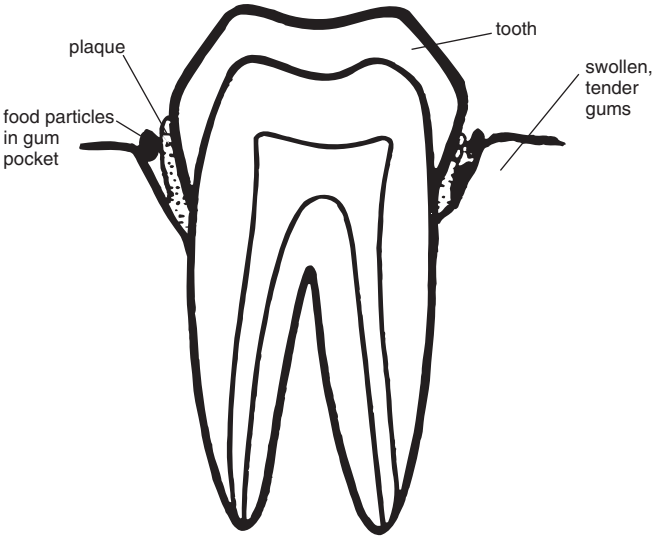
What are the causes?

Dental problems

Halitosis is mainly caused by dental problems, usually tooth decay or plaque and food trapped in the gaps between the teeth. The bits of food undergo decay by bacteria, just like food left to rot, and this process causes an unpleasant smell. This problem can also occur in dentures when food particles stick to them.

Another common dental problem is inflammation of the gums (*gingivitis*), which is usually caused by dental plaque at the base of the teeth as we get older. The gums tend to be sore and bleed on brushing.

Plaque and gingivitis often appear together, and both contribute to halitosis.



Gases from the stomach

Another cause is gases and smells coming from the stomach due to the breakdown of some foods. Certain people seem to be prone to this problem. It is worse when fasting. Foods that tend to cause problems are onions, garlic, peppers, alcohol, spicy salami and similar meats.

Medical causes

Medical disorders that cause halitosis include:

- tonsillitis
- chronic nose and sinus infections
- lung disorders (e.g. TB and bronchiectasis)
- cancer
- general infections with fever (e.g. glandular fever)
- diabetes
- liver disease
- kidney disease
- drugs, including smoking

Other possible causes

- anxiety and stress
- habitual mouth breathing, which dries saliva in the mouth
- sulphur compounds from the back of the tongue

What are the effects?

It is not a serious problem, but it can seriously affect the personal and social life of sufferers, including their self-esteem.

How is it managed?

Dental and mouth care

The most important thing is to clean the teeth and mouth regularly, especially with a toothbrush and dental floss. To get rid of plaque and tiny food particles it is important to:

- Brush the teeth regularly during the day, immediately after each meal if possible.
- Rinse the mouth out with water after meals.
- Use dental floss each day to clean the teeth.
- Gargle with an antiseptic mouthwash (e.g. Listerine, Cepacol).
- Gently brush the back of the tongue with a soft toothbrush.

Nutrition

- Ensure you have at least 3 healthy meals a day. Regular eating helps.
- Avoid foods such as onions, garlic, peppers and spicy salami.
- Avoid strong cheeses.
- Avoid excessive alcohol (maximum 4 standard drinks a day for men, 2 for women).
- Chewing fresh parsley, especially after eating onions and garlic, is helpful.

Lifestyle

- Avoid fasting for long periods during the day.
- Avoid smoking.
- Avoid excessive coffee (maximum 3 cups a day).

Special tip

A proven method is to gargle an oil and water mixture. Make up a mixture with equal volumes of aqueous Cepacol and olive oil. Gargle a well-shaken mixture and expel, 4 times a day.

Hangover

What is a hangover?

A hangover is the extreme drained and uncomfortable feeling the morning after a bout of excessive drinking of alcohol. It is a type of acute drug toxicity. The main symptoms are headache, nausea and fatigue.

What is the cause of the sickness?

There are several factors involved in leading to the toxic effects of alcohol on the brain and the rest of the body and particularly to the state of dehydration, which is a key feature. How bad you feel after an evening's drinking depends partly on your basic constitution, your conditioning to drinking and also on what and how much you have drunk. Most alcoholic drinks contain substances called *congeners* that combine with the amount and strength of the alcohol to give a drinking bout its hangover effect. Because alcohol is a diuretic drug it causes an increased output of urine thus leading to dehydration of the body.

What are the most potent drinks?

Brandy, bourbon and red wine produce the most hangovers. Gin and vodka contain few congeners and are the least likely to cause hangover. Champagne or sparkling chardonnay is also a potent drink particularly on an empty stomach. Any fizzy drink is not advisable during a solid drinking session because the gas increases the rate of absorption of alcohol.

What other factors contribute to hangovers?

- smoking—an important contributing factor
- drinking on an empty stomach or with little food
- fast drinking especially 'skolling'

What are the risks?

Next-day performance can be a problem and dangerous in people with responsible jobs requiring alertness and fine skills such as transport drivers and pilots. Making a habit of partying with hangovers can lead to chronic alcohol dependence and toxicity.

What are some of the myths of alcohol folklore?

There are several traditional beliefs associated with drinking but their validity is questionable.

- *It is risky to mix your drinks*: For example, to have beer after champagne, whisky or wine after gin, or red wine after white wine. Although mixing may contribute to hangover there is no evidence that it is harmful. It is best to mix water with alcoholic drinks, for example, mineral water to follow or precede alcohol.
- *A hair of the dog that bit you eases the hangover*: That is, try to alleviate a hangover by having a drink or two the following morning. This may help you feel better due to taking fluid and reversing the withdrawal symptoms but it is a dangerous practice if used regularly. It can be a forerunner of alcohol dependence.
- *Drinking coffee sobers you up*: This may be partly true but coffee also has a diuretic effect and leads to loss of fluid.

How can hangovers be prevented or minimised?

Much of this advice is common sense and you can set your own strategies.

- Drink alcohol on a full stomach—combine it with food of any kind. This is probably the best single thing you can do besides drinking less to reduce the severity of a hangover.
- Select alcoholic drinks that suit you. Avoid drinking excessive champagne on an empty stomach when you arrive at a function.
- Avoid fast drinking—keep it slow, choose your drinks for their flavour not their 'kick' and enjoy the taste of each relaxing sip.
- Restrict the quantity of alcohol you drink—set yourself reasonable limits and stick to them.
- Dilute your drinks—adding non-alcoholic liquid mixtures to strong drinks is effective. Look for the tall container of soda water, water or tonic. Mix your drinks by having a glass of water or non-alcoholic juice between drinks or making it the 'just one more drink'.
- Beer drinkers should use 'light' beer.
- Avoid or limit smoking while you drink.
- Drink three large glasses of water before retiring.
- For headache take 2 tablets of paracetamol before retiring.

What is the treatment?

- Drink lots of fluids, preferably water.
- Drink sweetened orange juice or tomato juice: such fruit juices help eliminate alcohol.
- A drink of honey in lemon juice helps.
- Tea (preferable) and coffee are suitable drinks but follow coffee with water.
- Have a substantial meal but avoid fatty food.
- Take 2 paracetamol tablets for discomfort especially for headache.

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Hay fever

What is hay fever?

Hay fever (also known as *allergic rhinitis*) is an allergic reaction of the nose, throat and eyes to irritating particles in the air. It is similar to asthma, except that the oversensitive (allergic) reaction occurs in the upper respiratory tract instead of the lungs.

There are two types of allergic rhinitis:

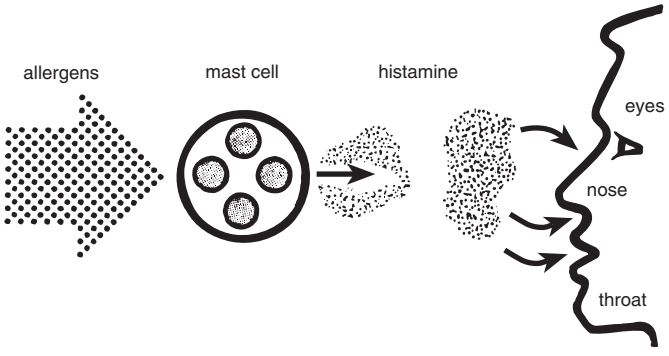
- *seasonal rhinitis*, which occurs only during certain seasons, usually spring
- *perennial rhinitis*, which is present throughout the year

What are the symptoms?

Symptoms are sneezing, running and itching nose, itching dry throat and itching eyes. Sufferers usually feel generally listless and irritable and may find it difficult to concentrate.

What is the cause?

The airborne irritants, also known as *allergens*, enter the nose, throat and eyes and cause sensitive cells (*mast cells*) to become active (rather like a dormant volcano erupting). These cells release a substance called *histamine*, which causes the symptoms.



What are the allergens?

The allergens are either foreign proteins (tiny invisible particles from plants and animals) or chemicals. They include:

- pollens from trees (in spring) and grass (in summer)
- house dust mites (cause perennial rhinitis)
- mould
- hair, fur or feathers (from cats, dogs, horses or birds)
- some foods (such as milk, eggs, peanuts and peanut butter)

Many people do not know what they are allergic to.

Do any other things aggravate hay fever?

Chemicals such as smoke, paints and sprays, cosmetics and aspirin can make hay fever worse. Emotional upset, fatigue, alcohol, chilly damp weather and air-conditioning can aggravate it also.

Is it inherited?

It does tend to be hereditary. Children whose parents are allergic have an increased chance of getting hay fever.

It is a common disorder, and people can grow into it and out of it at any age.

What are the risks?

Hay fever is not a serious disease but, if not treated, it can lead to asthma, nasal polyps and hearing problems.

Can hay fever be cured?

No, but modern treatment can control the problems and relieve the symptoms. People do not have to suffer with it and should contact their doctor if it is troublesome. Hay fever can be so mild that some people do not realise they have it; and some people seem to grow out of it.

What is the treatment?

Self-help

Keep healthy, eat a well-balanced diet, avoid 'junk food' and live sensibly with balanced exercise, rest and recreation. If your eyes give you problems, try not to rub them, avoid contact lenses and wear sunglasses.

Avoid using decongestant nose drops and sprays: although they soothe at first, a worse effect occurs on the rebound.

Avoidance therapy

Avoid the allergen, if you know what it is. (Consider pets, feather pillows and eiderdowns.)

Sources of the house dust mite are bedding, upholstered furniture, fluffy toys and carpets. Seek advice about keeping your bedroom or home dust-free, especially if you have perennial rhinitis.

Pets, especially cats, should be kept outside.

Avoid chemical irritants such as aspirin, smoke, cosmetics, paints and sprays.

Medical help

Your doctor has many treatments available, ranging from antihistamine pills to desensitisation (after skin testing reveals your allergens). The newer antihistamine pills do not cause as much drowsiness as did the older ones. Sprays for the nose and drops for the eyes, available by prescription, are very effective.

Head injury

What happens?

The patient has sustained a head injury that appears to be mild. He or she has been observed and is showing no serious signs of damage, so can go home and expect that rapid recovery will follow. However, very rarely, complications may follow at any time over the next few days.

What causes complications?

The brain, which has the consistency of jelly, is housed very compactly in a rigid case—the skull—and cannot tolerate any increase in pressure. If this occurs due to bleeding or swelling, pressure is exerted on the base of the brain, which contains the vital centres controlling such functions as breathing and heart action.

The problem may occur gradually, and certain warning signs will develop that indicate the pressure will have to be relieved.

What is concussion?

Concussion is the typical head injury that involves a temporary disturbance of function of the brain. The effect can vary from mild giddiness or headache to loss of consciousness. There may or may not be a brief period of unconsciousness. The other symptoms, according to the severity of the blow to the head, can include being stunned or dazed, senselessness, headache (may be the only symptom), amnesia (loss of memory), dizziness, blurred vision, vomiting, irritability, unsteady walking and mental lapses.

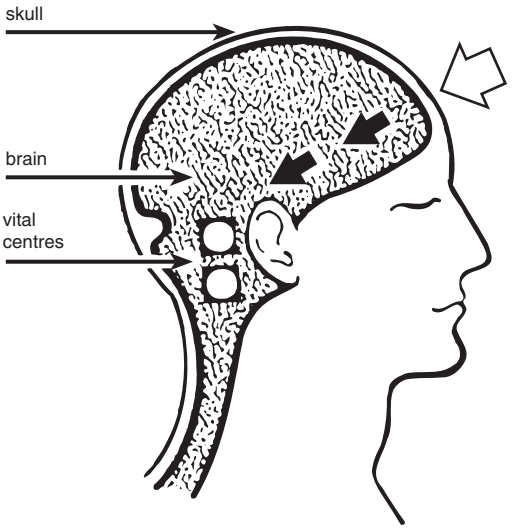
The usual outcome is excellent with recovery in an hour or so, but occasionally some may take a few days to return to normal.

Note: There is no such thing as 'delayed concussion'. There can be a 'post-concussion syndrome' with persistent headache and dizziness. It requires investigation.

What should you do?

Someone in the household should keep the patient under close observation over the next 24 hours (at least) and bring him or her back to the surgery or to the casualty department of the nearest hospital *immediately* if they notice any of the following features:

- unconsciousness or undue drowsiness, such as difficulty waking up
- confused, irrational or delirious behaviour
- headache that continues
- bleeding or discharge from the ear or nose



- repeated vomiting
- fits or spasms of the limbs or face
- blurred or double vision

In children

Children should be allowed to go to sleep, but should be woken every 4 hours to see if they are rousable and conscious.

Other points

Diet

Any food and drink can be taken in moderation after the first 4 hours, but avoid alcohol.

Pain-killers

Paracetamol can be taken in the usual doses for headache. Avoid taking aspirin.

Drugs

Avoid sedatives; take no medication unless instructed.

Icepacks and cold compresses

Icepacks and/or cold compresses can be used over swollen or painful areas of the head.

Rest

- Stay resting *in bed* for 2 days with the head and shoulders slightly elevated.
- When you start getting up, return to bed if you feel giddy or get a headache.
- Rest quietly at home and do not return to work or your normal activities until after 7 days.

Hearing impairment in the aged

Loss of hearing tends to gradually increase with advancing age. Every year after the age of 50 we lose some of our hearing ability. As many as 25% of people aged 60–70 report hearing impairment. The decline varies from person to person and, like greying of hair, occurs at different rates.

What are the symptoms?

The symptoms vary so that some barely notice a problem while others are severely disabled.

Common symptoms include:

- inability to hear speech and other sounds loudly enough
- inability to hear speech and music clearly, even when it is loud enough
- inability to understand speech, even when it is loud enough (a problem of language reception)

People with mild hearing loss notice only subtle differences and may have trouble hearing certain high frequency sounds such as *s*, *f* or *th*. They may also have trouble hearing in certain situations, such as at a party or in a crowd where there is a lot of background noise. Those with moderate hearing loss have trouble hearing in many situations.

In very old people, deafness can lead to unexpected behavioural problems such as confusion, agitation, anxiety, depression and paranoid delusions.

What are the causes?

Hearing loss takes two forms: *conduction loss*, where the sound waves are blocked in their passage to the inner ear, and *neurosensory loss*, where the inner ear cannot pick up the sound waves properly and thus transmit them to the brain.

Causes of conductive deafness (usually reversible)

- too much wax in the ears
- other debris in the ear canal (e.g. cotton bud tip)
- ear infection
- faulty vibrating bones (*otosclerosis*)

Causes of neurosensory deafness (usually not reversible)

- nerve damage
- exposure to loud noise, including sudden explosions
- certain drugs
- brain tumours
- presbycusis

What is presbycusis?

Presbycusis (pronounced 'prez-bee-ku-siss') is also known as 'old age' deafness and is the commonest type of hearing impairment in older people. It is caused by wear and tear in the very delicate workings of the inner ear. It does not cause total deafness but difficulties in understanding speech, especially with background noise.

What are some features of presbycusis?

- inability to hear high frequency sounds
- usually an association with tinnitus (ringing in ears)
- a genetic tendency to the problem
- intolerance of very loud sounds
- difficulty picking up high frequency consonants (e.g. *f*, *s*), which are often distorted or unheard

People with presbycusis frequently confuse words such as *fit* and *sit*, *math* and *mass*, *fun* and *sun*. They often say 'Don't shout—I'm not deaf'.

What signs indicate that hearing should be tested?

- speaking too loudly
- difficulty understanding speech
- social withdrawal
- lack of interest in attending parties and other functions
- complaints about people mumbling
- requests to have speech repeated
- complaints of tinnitus
- setting television and radio on high volume

Patients are usually referred to an audiologist after a medical check.

What can be done?

If medical problems such as fluid or wax in the ear are not present and 'old age' deafness is proved on testing, a hearing aid is usually fitted. There is no cure for the problem and hearing aids are not the perfect answer. However, modern hearing aids can be tailor-made for the individual person and are usually quite effective.

Hearing problems in children

What can cause hearing problems?

Your child may be born with a hearing problem, which can be hereditary or could have been caused by an infection such as rubella during pregnancy. The commonest cause of hearing problems is a 'glue ear', which is a build-up of sticky fluid in the middle ear following middle ear infections.

The outer ear can get blocked with things such as wax and foreign objects put in there by the child.

How might I know my child is deaf?

Your child may not respond in an expected way to sounds, especially to your voice. Deaf children do not respond to normal conversation or to the television, even if it is turned up loud.

Deafness could show up as unusual problems such as poor speech, disobedience and other behavioural problems and learning problems at school. The kindergarten or school teacher may pick up the problem.

What are the early signs of normal hearing?

The following stages at various ages are useful guides:

- *1 month*: should notice sudden constant sounds (e.g. car motor, vacuum cleaner) by pausing and listening.
- *3 months*: should respond to loud noise (e.g. will stop crying when hands are clapped).
- *4 months*: should turn head to look for source of sound such as mother speaking behind the child.
- *7 months*: should turn instantly to voices or even to quiet noises made across the room.
- *10 months*: should listen out for familiar everyday sounds.
- *12 months*: should show some response to familiar words and commands, including his or her name.

Can hearing tests be done on babies?

Yes. Hearing can be tested at any age. No baby is too young to be tested, and this includes the newborn. If you have any concerns, contact your family doctor, who can arrange a hearing test at an acoustic laboratory. It is most important to diagnose a hearing problem as early as possible. Do not put it off. The best time to screen is by 8 months and certainly before 10 months. Nowadays most centres aim to diagnose hearing loss at 6–8 weeks of age.

Are hearing tests complex?

No; the tests are quite simple. They are not uncomfortable and, as you can imagine, the audiologists are very experienced in dealing with children and getting accurate results.

Remember

- Hearing problems are common in children.
- Children are normally born with hearing.
- However, some are born with deafness.
- The earlier deafness is detected the better.
- The first 12 months are critical for diagnosis and treatment.
- The commonest cause of hearing difficulties is ear infection leading to 'glue ear'.
- Deafness can cause learning problems at school, poor speech and behaviour problems.
- Any speech or language delay requires investigation.
- Hearing tests are easy to do at any age.
- Hearing aids are required by 12 months to be effective.

Heart failure

What is heart failure?

Heart or *cardiac failure* occurs when the heart, which is a muscular pump, fails to pump enough blood around the body. The heart becomes inefficient either because the muscle is weakened or because there is a mechanical fault in the valves controlling the flow of blood.

The mechanics of the heart

The heart is basically a series of two pumps, with the smaller right side pumping blood (returning to the heart) to the lungs to get oxygen. The left side of the heart has the big job of pumping blood rich in oxygen around the body. Heart failure may affect only one side of the heart but more usually affects both sides, in which case it is called *congestive cardiac failure*.

In left-sided failure, the lungs become congested with fluid, causing breathlessness; in right-sided failure, the blood pools in the veins, causing swelling in the tissues, especially of the legs and abdomen.

The heart function is assessed best by a procedure called an echocardiogram.

What are the symptoms?

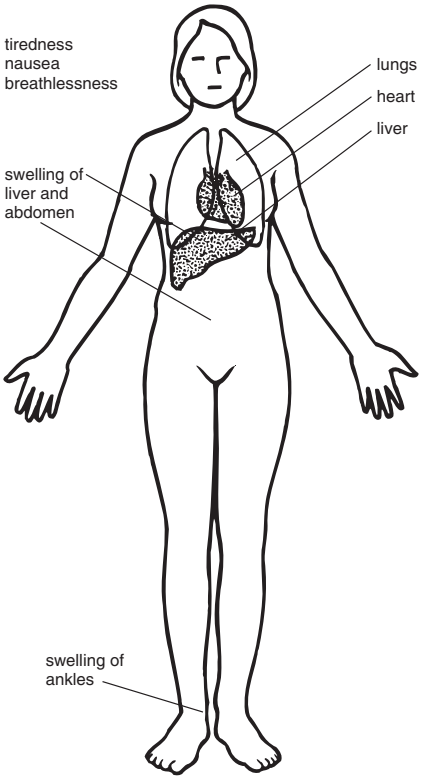
The main symptom is breathlessness, usually after exertion. Other symptoms are tiredness, lethargy, nausea, and swelling of the ankles and abdomen.

What causes it?

Coronary artery blockage, high blood pressure, faulty heart valves and alcohol abuse are the main causes.

What are the risks?

Despite its name, heart failure is not usually an immediately life-threatening disease; it generally responds to treatment and can be held in check for a long time. If untreated, it puts a great strain on all the body, which tends to become waterlogged. If treated successfully, the only danger comes from the underlying cause such as coronary artery disease or alcohol abuse.



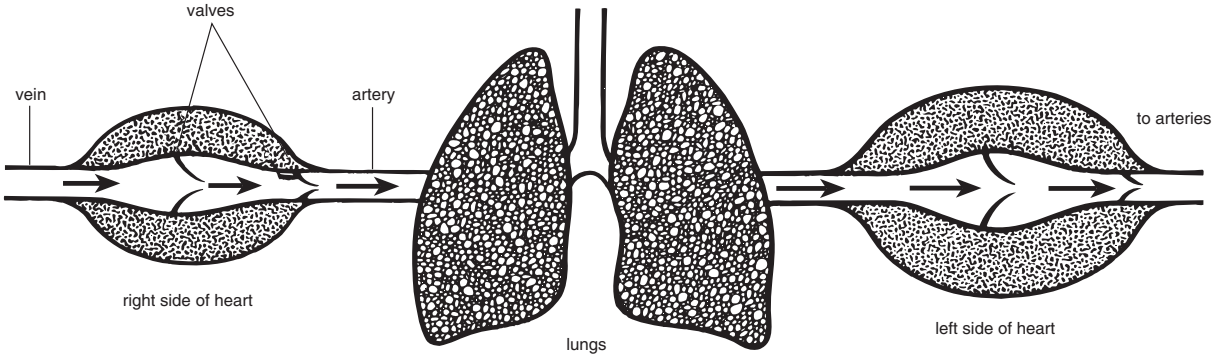
Symptoms of right-sided failure

Self-help

- Reduce your physical activity: rest if your symptoms are severe but take exercise such as walking if your symptoms are mild or absent.
- Cut down your salt intake: have a salt-free diet.
- Limit your fluid intake to less than 1½ litres a day.
- Reduce your weight if you are overweight.
- Avoid smoking.
- Take no alcohol or small quantities only.

Medication

The most commonly used medicines are *vasodilators* (ACE inhibitors)—the key drugs—to open up the blood vessels, and fluid tablets (*diuretics*). This helps take the load off the heart. A drug called digoxin may be used to improve the strength of the heart. Your doctor will advise you about other drugs.



The mechanics of the heart

Heartburn

What is heartburn?

Heartburn is not a disease but a symptom of burning discomfort in your chest, usually associated with an acid taste in the mouth. It is also referred to as *indigestion* or *dyspepsia* and is associated with drinking and eating.

What causes heartburn?

It is caused by the reflux of the acid contents of the stomach back up the oesophagus (gullet) and sometimes into the throat. It may be caused by a peptic ulcer. Reflux occurs because the valve made by a ring of muscle at the junction of the oesophagus and stomach does not close fully, and may be associated with a hiatus hernia.

Factors that bring it on are:

- particular foods (e.g. cabbage, onions, cucumber, curries, pastries—especially pies and pasties, fruit cake)
- certain drinks (e.g. wine—especially red wine, beer, carbonated drinks, coffee)
- eating too fast
- rich or big meals
- chewing gum long and hard
- stress and anxiety
- pregnancy
- old age
- certain drugs (e.g. antirheumatism drugs, aspirin)
- obesity (a common factor)

What tests are done?

Tests may not be necessary, but if it persists or your doctor is concerned about an ulcer, X-rays may be taken or a tube called a *gastroscope* may be passed down into the stomach to inspect it.

How can it be prevented?

Don'ts:

- bolt your food down
- eat standing up
- smoke
- eat fatty foods (e.g. pastries)
- eat spicy foods
- eat large or rich meal
- bend over for work
- strain at toilet
- drink wine with meal
- eat foods that 'burn'
- drink coffee or alcohol late at nigh

Dos:

- eat in a slow and relaxed manner
- eat sitting down and relaxed
- avoid foods that 'burn'
- eat small or moderate meal
- squat rather than bend
- keep your bowels regular
- avoid stress: relax!
- relax for half an hour after a meal
- reduce your alcohol intake

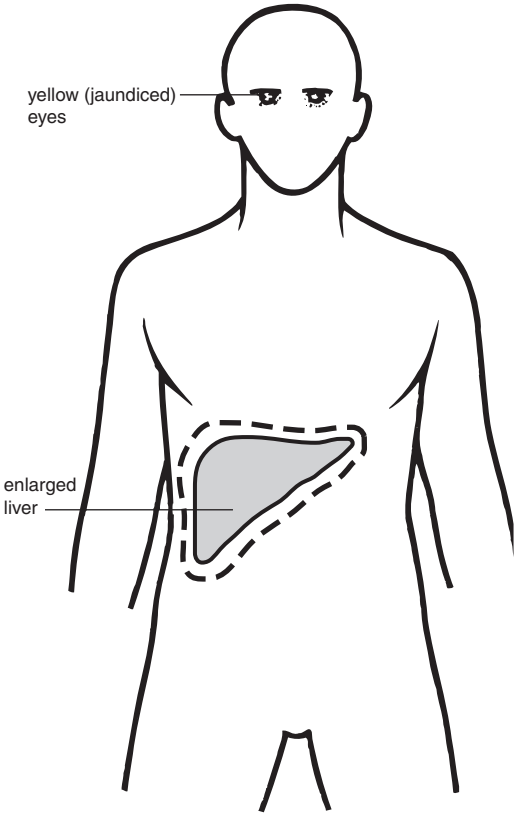
What is the treatment?

- Attend to the above preventive advice.
- Learn what brings on your heartburn and deal with it.
- Take antacids when you feel heartburn coming on and before bed at night.
- Make sure that you get to your ideal weight, should you be overweight.
- Your doctor may prescribe other medicine to reduce the level of acid in your stomach.

Hepatitis A

What is hepatitis A?

Hepatitis A, also known as *infectious hepatitis* and *yellow jaundice*, is a viral infection of the liver. *Hepatitis* means inflammation of the liver. Unlike most other types of hepatitis, hepatitis A invades the liver after it enters the body from the bowel by taking in infected food or water.



Signs of hepatitis A

What are the symptoms?

The main sign is yellow skin (jaundice) due to a building up of the waste pigment *bilirubin* in the body. Another is darkening of the urine and pale faeces. A flu-like illness may be noticed before the jaundice, including loss of appetite, nausea, fever, muscle aches and pains. Some people may never have symptoms. It is diagnosed by a simple blood test.

How serious is it?

Hepatitis A is usually a mild disease, especially in children, although some cases can be severe. Complete recovery is usual, but some people can be left with chronic hepatitis and liver damage.

How is it spread?

The virus is present in the bowel and is spread from person to person through close contact such as infected hands, towels and food, especially from contaminated water and shellfish. That is, it gets from the faeces of the infected person to the mouth of another. It may take 15–50 days after picking up the virus before the disease becomes evident, with 28 days being the average time.

The patient is most infectious 2 weeks before and 1 week after the onset of jaundice.

Hepatitis A is more likely to be contracted overseas in a Third World country with poor hygiene.

How is the spread prevented?

A few simple measures can stop the disease spreading to close contacts and family members. These are:

- Wash your hands carefully after using the toilet and disinfect them with antiseptic. Also disinfect the bathroom doorknob.
- Do not handle food with your fingers.
- Do not share crockery and cutlery during meals.
- Protect food from flies.
- Do not use tea-towels to dry dishes.
- *All* family members should wash their hands often and carefully.

Note: Normal dishwashing and hot-water laundering is sufficient to sterilise your crockery, cutlery, clothing and bed linen.

Scrupulous personal hygiene is *extremely* important to stop the spread of infection. Food-counter employees should not handle food as well as money.

Gamma globulin injection

Your doctor may advise that each member of your family be given an injection of immunoglobulin, which protects against hepatitis for 3 months. The injection should be given within a week of exposure.

Immunisation

People can now be immunised against hepatitis A by a course of 2 injections.

What is the treatment?

Even though the disease may be mild, medical advice is essential. Rest is very important. It is best to stay in bed until the jaundice begins to fade, but you can get up to shower, bathe and use the toilet. Try to maintain a nutritious diet and drink lots of water (at least 8 glasses a day). Do not drink alcohol until you have recovered. If fatty foods upset your stomach, avoid them until you feel better. Your doctor may recommend that you stop taking certain medications (e.g. the contraceptive pill).

Hepatitis B

What is hepatitis B?

Hepatitis B is a virus that infects the liver causing it to become inflamed. It is very infectious, more so than the AIDS virus.

How serious is the problem?

It is very epidemic in some parts of the world and is now on the increase in the world.

Most people with hepatitis B recover, although some have a long and serious illness. It may be fatal in people who get cirrhosis or cancer of the liver from it. 5–10% of sufferers become carriers. Hepatitis B is especially serious for infants who acquire it.

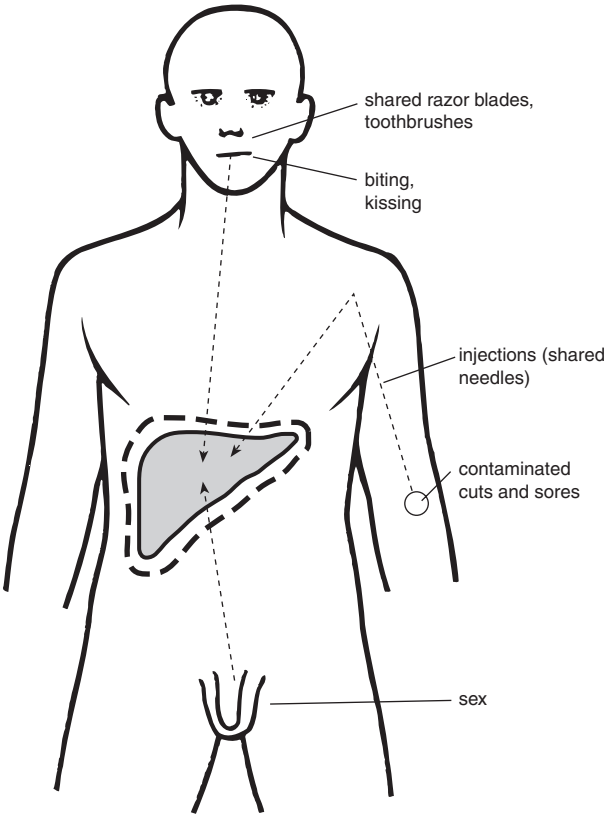
What is a carrier?

A *carrier* is a person who has not been able to get rid of the virus from his or her body. Carriers are a risk to other people and have a responsibility to tell dentists, doctors and other people about this. The doctor will advise on how to cope.

What are the symptoms?

This depends on whether the attack of hepatitis is *acute* or *chronic*. The acute attack produces a flu-like illness and yellow skin (jaundice). The chronic form comes on slowly and is more serious. It may take months from the time you get the virus until the illness develops.

Some people may never have symptoms.



Transmission of hepatitis B

How is it spread?

The virus is carried in all body fluids: blood, saliva, semen and vaginal secretions, breast milk, tears and perspiration. It is usually picked up by absorption of infected blood through cuts and sores in the skin, by sexual intercourse or by sharing infected items such as razor blades, toothbrushes, needles and syringes. Procedures such as ear piercing and tattooing can also spread it. The commonest ways are through intravenous drug use and sexual intercourse with carriers.

Who are at highest risk?

- intravenous drug users
- male homosexuals
- heterosexuals and bisexuals with multiple sex partners
- prostitutes
- prisoners and other institutionalised people
- certain ethnic groups
- health-care workers (e.g. doctors, dentists, nurses)
- babies born to carrier mothers
- children in kindergartens and schools, especially where exposed to a variety of people

Is there a cure?

- There is no easy cure, but it can be prevented.
- Prevention is done by good hygiene and vaccination.

Good hygiene

- Do not share personal items (e.g. razors, toothbrushes).
- Use a condom for sex.
- Be careful not to get another's blood on cuts or wounds.
- Do not share needles.

Vaccination

This involves a course of 3 injections. It can be combined with hepatitis A vaccine.

What is the treatment?

Carriers should follow the 'good hygiene' guidelines. They should eat a normal healthy diet and reduce any alcohol to no more than one standard drink per day.

If there is liver damage, interferon and an antiviral drug is usually prescribed.

Remember

- A blood test can tell whether you have immunity or are a carrier.
- Talk to your doctor about the prevention of hepatitis B.
- Be responsible and inform your contacts.

Hepatitis C

What is hepatitis C?

Hepatitis C is a virus that infects the liver. It has only been discovered in recent years and is the commonest virus causing hepatitis. About 9 in 1000 Australians carry the virus in their blood.

How do you know if you have it?

It is diagnosed by a blood test—the hepatitis C antibody test. The result will not be positive until 2–3 months after picking up the virus.

How serious is the problem?

Many infections are mild, but unfortunately there is a high chance (almost 70%) of developing a simmering infection called chronic hepatitis C, which is a serious problem as it leads to cirrhosis of the liver.

How is it spread?

Hepatitis C is spread by blood, especially by sharing needles from intravenous drug use (most cases), or from tattooing and body piercing.

Before 1990 it was possible to get hepatitis C from blood transfusions, but since then blood from donors has been tested for hepatitis C. There appears to be a very small risk of spread during homosexual or heterosexual intercourse. It also does not spread easily through normal family or household contact so families and friends can be reassured. However, sharing razor blades and toothbrushes can spread the virus. Carriers have a responsibility to inform doctors, dentists and other close contacts about their problem.

What are the symptoms?

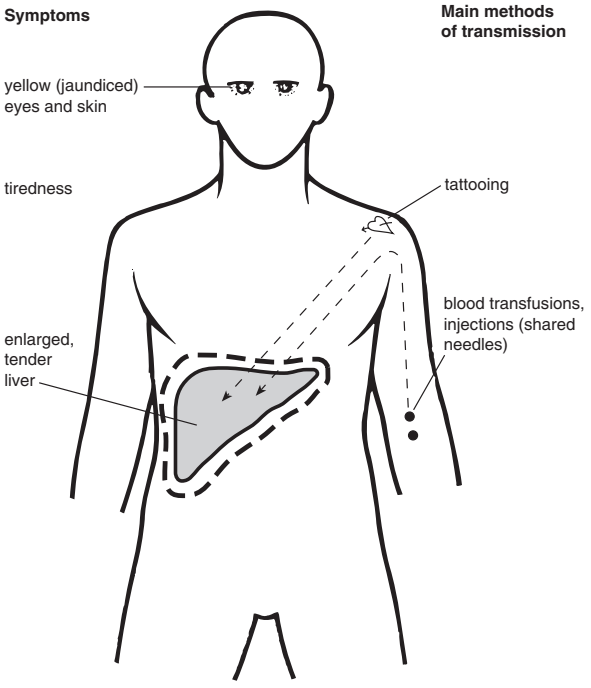
The symptoms vary from person to person and in many cases the infection may not cause any symptoms. Symptoms may take from 15 to 180 days to appear from the time of infection. The acute attack produces a flu-like illness with tiredness and yellow skin (jaundice). The serious chronic form comes on slowly, even after several years.

What happens with chronic hepatitis C?

Chronic hepatitis is more likely to occur with hepatitis C than with any of the other hepatitis viruses. This gradually causes damage to the healthy liver cells, causing hardening of the liver. This is called *cirrhosis*, which makes the liver fail and sometimes leads to cancer of the liver.

Who is at highest risk?

- injecting drug users
- sex industry workers
- renal dialysis patients
- people who received blood transfusions before testing was available (February 1990)



- tattooed people
- prisoners (high level of drug injections)

How can the spread of hepatitis C be stopped?

If you have a positive hepatitis C test:

- Do not donate blood.
- Do not share needles.
- Advise health-care workers, including your dentist, about your hepatitis C.
- Do not share personal items (e.g. razors, toothbrushes).
- Wipe up blood spills with household bleach.
- Cover cuts and wounds with a firm dressing.
- Safely dispose of blood-stained tissues, tampons and the like.
- Practise 'safe' sex.

Hepatitis C does not seem to spread easily from mother to baby.

Is there a cure?

Some patients who are identified by DNA testing can be cured and there are new drugs to treat hepatitis C. Prevention is really the best 'cure'. There is no vaccine currently available.

What is the treatment?

- Rest if you feel unwell.
- Maintain a nutritious diet: well balanced and low fat.
- Avoid alcohol or have only small amounts upon recovery and do not smoke.
- Keep in touch with your doctor.
- Chronic hepatitis C can be treated with interferon and other antiviral drugs in suitable patients.

Herpes simplex (cold sores)

What is herpes simplex?

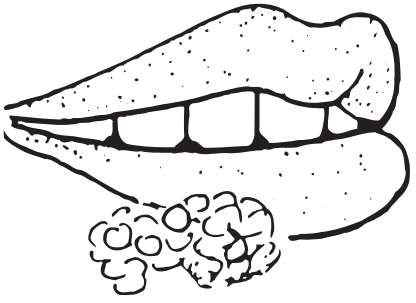
Herpes simplex (cold sores) is a viral infection of the skin that causes two types of infection:

1. the classical cold sores on the lips and around the mouth
2. genital cold sores, which are spread by sexual contact

This pamphlet will consider cold sores on the face.

What are the symptoms?

This common infection is known also as 'fever blisters'. The first symptom is itchiness and tingling at the site of the developing infection, usually on the edge of the lips. Blisters soon appear and later burst to become crusted sores. The person usually feels unwell. The infection occurs only occasionally in some people but frequently in others.



Herpes simplex

How does herpes simplex develop?

It usually begins in childhood as a mouth infection. The virus then lives in the nerves supplying the skin or eyes, waiting for an opportunity to become active. It may erupt on any area of the body's skin or in the eyes. The following may precipitate eruptions:

- overexposure to sunlight
- overexposure to wind
- colds, influenza and similar infections
- heavy alcohol use
- fever from any cause
- the menstrual period
- physical stress
- emotional stress

Does it spread?

Herpes simplex is contagious. It is present in saliva of affected persons and can be spread in a family by the sharing of drinking and eating utensils and toothbrushes or by kissing.

It is most important not to kiss an infant if you have an active cold sore.

Is herpes simplex dangerous?

It usually presents no serious risk, but it can be very unpleasant for patients who have eczema. It also can infect the eyes, and can cause a serious ulcer on the cornea.

What is the treatment?

There is no special treatment; most sores heal and clear in a few days. They should be kept dry: dabbing them with plain alcohol or, better still, a solution of menthol in SVR alcohol, will relieve itching and help keep them clean and dry.

When you feel them developing, the application of an ice-cube to the site for up to 5 minutes every hour for the first 12 hours is soothing. Also, an antiviral ointment may help, but it must be applied early to be effective.

Notify your doctor if you have a persistent fever, pus in the sores or irritation of an eye.

How can it be prevented?

Those prone to cold sores should avoid overexposure to sun and wind. If you cannot, apply 15+ sun protection lip balm or zinc oxide ointment around the lips and other areas where cold sores have erupted previously.

Herpes zoster (shingles)

What is herpes zoster?

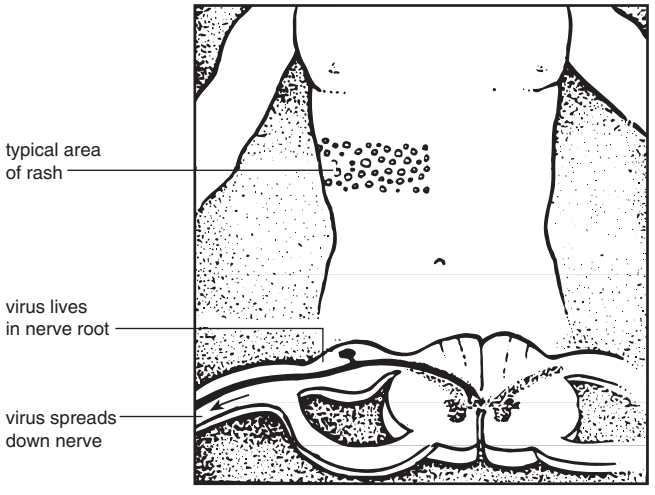
It is an infection in a nerve by the virus that causes chickenpox. The term comes from the Greek *herpes* (to creep) and *zoster* (a belt or girdle). *Shingles* is from the Latin *cingere* (to gird) or *cingulum* (a belt).

How does it occur?

Contact with someone with chickenpox may cause it, but usually it is a reactivation of the chickenpox virus lying dormant (often for many years) in the root of a nerve in the brain or spinal cord. The dormant virus can be stirred into activity by stress or by the loss of natural immunity as we get older. The virus multiplies and spreads, causing pain in the nerve in which it resides.

Where does it occur?

Almost any part of the body can be involved, but common sites are the right or left side of the chest or abdomen and the face.



Herpes zoster

What are the symptoms?

Apart from feeling unwell, sometimes with a fever, the main symptoms are pain and a rash.

Pain

- This can vary from mild to severe.
- It is burning in nature, but can be knife-like.
- It precedes the rash and lasts for 1–4 weeks after the blisters disappear; it can persist for several weeks.
- It always improves in time.

Rash

Groups of blisters appear in the skin that is supplied by the nerve. They itch and become crusted. The rash disappears after about 7 days but will leave scars or discoloured skin.

Who gets herpes zoster?

This relatively common disease is unpredictable and a person of any age can be affected. It is seen more often in people over the age of 50; sometimes children will get it during a chickenpox epidemic.

Is it contagious?

Yes, but only mildly. Rarely, children might acquire chickenpox after contact with someone who has herpes zoster, but it would be very unusual to 'catch' herpes zoster from another person.

Can the problem recur?

It is possible but most unlikely. One attack generally protects you from a second attack and gives lifelong immunity.

Old wives' tales

It is not true that it is a dangerous disease or that the patient will go insane. Another myth is that a person will die if the rash spreads from both sides and meets in the middle: this is nonsense.

For the majority, herpes zoster is a mild disease and an excellent recovery can be expected.

What is the treatment?

There is no cure for this viral infection, but you should see a doctor without delay because proper treatment may reduce the severity of the illness and the likelihood of pain after the sores have healed. You should:

- Rest as much as possible.
- Take simple pain-killers, such as aspirin or paracetamol, regularly.
- Avoid overtreating the rash, which may get infected. Calamine lotion may be soothing, but removal of the calamine crust can be painful. A drying lotion such as menthol in flexible collodion is better.
- Modern antiviral drugs are very effective, especially for more severe cases, and are usually prescribed during the first 3 days from the onset of the rash.

Herpes: genital herpes

What is genital herpes?

It is a form of sexually transmitted infection (STI) caused by the *herpes simplex* virus. It produces painful ulcers on and around the genitals of both sexes.

How is it caught?

It can be caught by direct contact through vaginal, anal or oral sex. Rarely is it transferred to the genitals from other areas of the body by the fingers, and it has never been proved that it can be transferred from places or objects such as toilet seats, towels, spas or swimming pools.

Contact is from person to person.

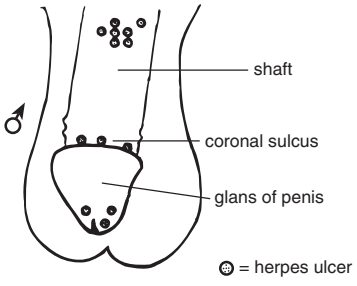
What are the symptoms?

With the first attack there is a tingling or burning feeling in the genital area. A crop of small blisters then appears; these burst after 24 hours to leave small, red, painful ulcers. The ulcers form scabs and heal after a few days. The glands in the groin can become swollen and tender, and the patient might feel unwell and have a fever.

The first attack lasts about 2 weeks.

Males

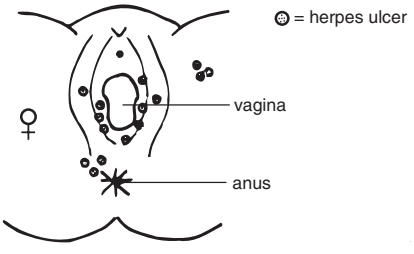
The virus usually affects the shaft of the penis, but can involve the glans and coronal sulcus, and the anus.



Usual sites of blisters in males

Females

Blisters develop around the opening of, and just inside, the vagina and sometimes on the cervix and anus. Passing urine might be difficult, and there can be a vaginal discharge.



Usual sites of blisters in females

In both sexes, it can affect the buttocks and thighs. A serious but uncommon complication, especially in females, is the inability to pass urine.

Does it recur?

After the first infection, the herpes virus remains deep in the nerves that supply the affected area of the skin. Half of those who have the first episode have recurrent attacks; the others have no recurrences.

Fortunately attacks gradually become milder, less frequent and usually stop eventually. Recurrences after many months or years can be precipitated by menstruation, sexual intercourse, masturbation, skin irritation or emotional stress.

What should you do?

If you think you have herpes, see your doctor or attend a clinic specialising in STI. You should not have intercourse during an attack, because you are likely to transmit the infection to your partner.

What is the treatment?

- Rest and relax as much as possible. Warm salt baths can be soothing.
- Antiviral ointments can help if they are used as soon as symptoms start. Other agents that help are Betadine lotion or 10% silver nitrate solution.
- Icepacks or hot compresses can help.
- Pain-killers such as aspirin or paracetamol give some relief.
- If urination is painful, pass urine under water in a warm bath.
- Keep the sores dry; dabbing with alcohol or using warm air from a hairdryer can help.
- Leave the rash alone after cleaning and drying; do not poke or prod the sores.
- Wear loose clothes and cotton underwear. Avoid tight jeans.
- Your doctor can prescribe a special antiviral drug. The drug is most effective if started on the first day of the infection.

How can it be prevented?

Spread of the disease can be prevented only by avoiding sexual contact during an attack. If you are not sure whether you are infective or not, use a condom (however, this is not absolutely protective) and wash your genitals with soap and water immediately after sex. Condoms should always be used where a partner has a history of infection. The antiviral drugs can be used to prevent frequent recurrent attacks. Make sure your sexual contacts are informed about your problem.

Can herpes cause cancer in women?

There may be a connection between genital herpes and cancer of the cervix, but that cancer is treatable if diagnosed early—'a smear a year' is the rule.

Hirsutism

What is it?

Hirsutism is the presence of excessive body or facial hair. For women, the areas most affected are the 'beard' area (upper lip, chin, front of the ears), the chest, the abdomen and the front of the thighs. The condition varies from being mild and hardly noticeable to being obvious.

What is normal?

Many women feel they are very 'hairy', but if this occurs in the normal female hair-growth areas (such as the armpits, forearms, pubic area and around the nipples) there is no cause for concern. A tendency to be 'hairy' may run in families or be prevalent in some races, such as those from the Mediterranean region. Even if the hair growth seems to be in a male pattern, there is usually no serious underlying cause and the problem can be treated. About 10% of Australian women are affected.

What causes hirsutism?

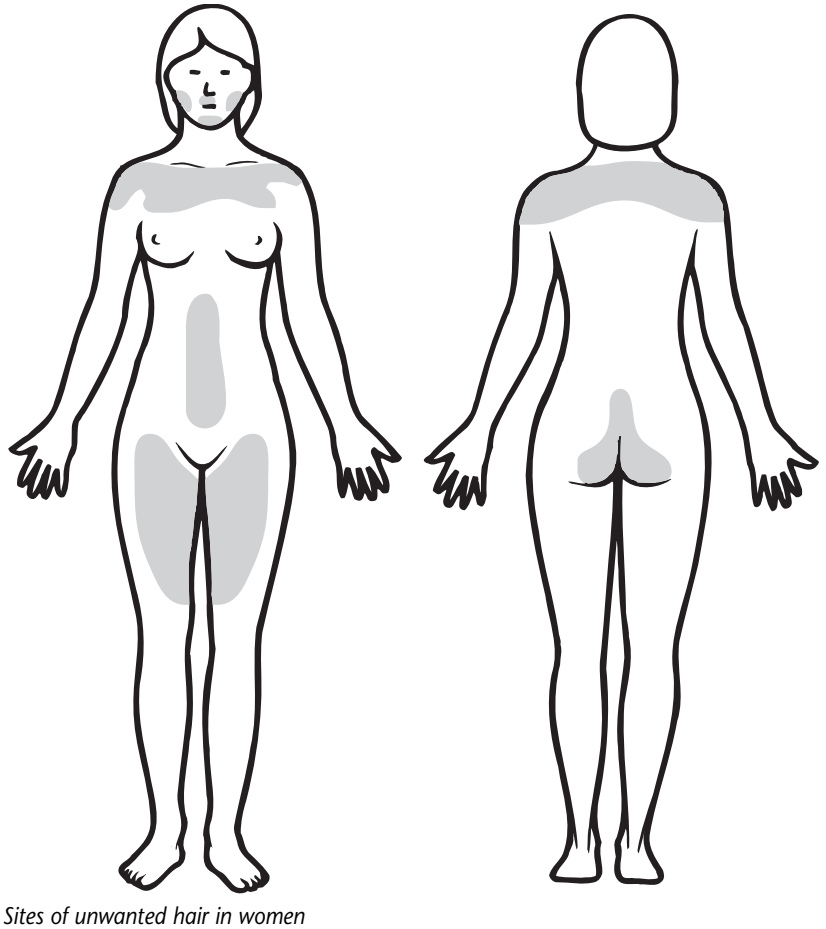
It is due to excessive hair growth caused by overactive male sex hormones (present in all women) at the hair root. The reason for this is unclear. Often hairiness runs in families or is more common in certain races, such as negroids. It is rare in orientals. Certain medications, such as anti-epilepsy drugs and some oral contraceptive pills, can cause it. Uncommonly, it is caused by cysts or tumours of the ovaries or adrenal glands.

What can be done?

Your doctor will need to take a full medical history and examine you to assess your hair growth. A blood test may be necessary.

What is the treatment?

- Your doctor may be able to reassure you that your hair growth is normal, and therefore no therapy is needed.
- Cosmetic measures (such as bleaching, waxing and shaving) and treatment with depilatory creams or electrolysis can help. Bleaching is a simple and good option. Your doctor will advise what will suit you. There is no evidence that shaving increases the rate of hair growth, but plucking the hair does stimulate growth. Do not pluck hairs around the lips and chin. Laser epilation may also help but seems to be most suited for dark hair on a light skin and lasts about 6 months.
- Medical treatment with drugs such as spironolactone can be used if your hair growth is excessive and causes understandable social embarrassment. It will probably take at least 3 months for you to notice any difference in your hairiness, and for most women the hair grows back once they stop taking the medications.

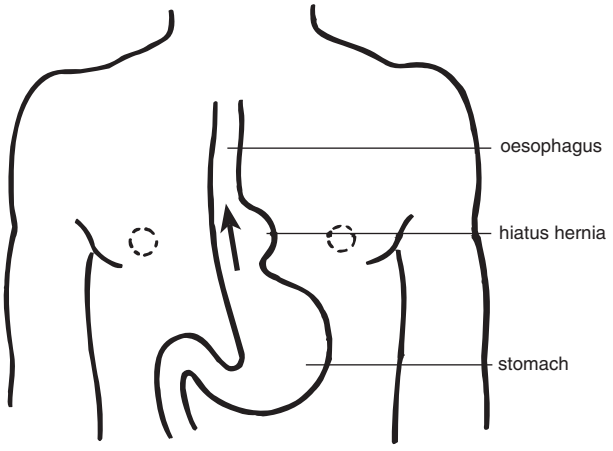


Sites of unwanted hair in women

Hiatus hernia

What is a hiatus hernia?

A *hiatus hernia* occurs when the upper part of the stomach, which is joined to the oesophagus (gullet), moves up into the chest through the hole (called a *hiatus*) in the diaphragm. It is common and occurs in about 10% of people.



What are the symptoms?

Most people are not troubled by a hiatus hernia, but if reflux of the acid contents of the stomach occurs (called *gastro-oesophageal reflux*), heartburn results. This is a painful burning sensation in the chest, which can sometimes be felt in the throat. Sudden regurgitation of acid fluid into the mouth can occur, especially when you lie down or bend forward. These symptoms are a problem when you go to bed and can wake you up. Other symptoms include belching, pain on swallowing hot fluids and a feeling of food sticking in the oesophagus.

Who gets a hiatus hernia?

It is most common in overweight middle-aged women and elderly people. It can occur during pregnancy. The diagnosis is confirmed by barium meal and swallow X-rays or by passing a tube with a camera on the end into the stomach (*gastroscopy*).

What are the risks?

Hiatus hernia is usually not serious; however, it can cause inflammation of the lower end of the oesophagus. This is called *reflux oesophagitis*, and it may cause bleeding (perhaps anaemia) or a stricture. A serious complication is twisting (called *volvulus*) of the herniated stomach in the chest. The warning signs in the months beforehand are epigastric fullness and pain whilst eating. These patients cannot cope with large meals. Cancer in a hiatus hernia is very rare, but there is a slight increased risk of it developing in the inflamed area.

What is the treatment?

Self-help

- Keep to your ideal weight.
- Avoid stooping.
- Avoid smoking.
- Reduce alcohol and coffee.
- Avoid tight corsets.
- Adjust your bed.
- Take antacids.
- Have small meals.
- Avoid spicy food.
- Avoid hot drinks.
- Avoid having supper.
- Avoid gassy drinks.

Losing weight nearly always cures it. Eating several small meals each day instead of 2 or 3 large ones helps. You must have a light evening meal without alcohol and avoid supper so that your stomach is empty on retiring. It takes about 1–2 hours for the stomach to empty.

Smoking certainly aggravates it, as do coffee and alcohol, especially spirits. If symptoms occur at night, you are advised to use extra pillows to prop up your head and shoulders. If this fails, you should raise the head of your bed about 10 cm (4 inches) to prevent acid reflux at night.

Medical help

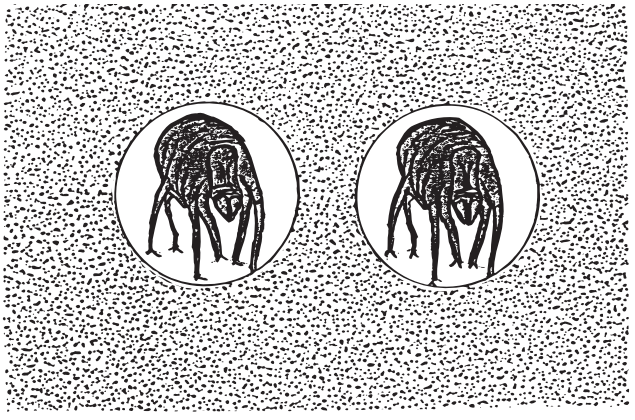
If over-the-counter antacids and other measures do not help, your doctor may prescribe a special mixture or tablets to reduce reflux. If your problem persists, an operation (which has good results) may be necessary.

> The key to coping with a hiatus hernia is to keep at ideal weight.

House dust mite management

What are house dust mites?

These are minute, insect-like organisms that cannot be seen by the naked eye. They live in house dust and thrive on eating human skin scales. They like warm, dark, humid conditions and multiply rapidly—the female mites can lay up to 50 eggs every 3 weeks.



House dust mites, magnified 300 times (actual size is that of a pin point)

Where are house dust mites mainly found?

- bedrooms (the number 1 risk): pillows, blankets and mattresses
- carpets
- soft furnishings

What problems do they cause?

Allergy to the mite (dead or alive) and to its waste products (such as protein in faeces) is a problem for some people. The allergic symptoms include hay-fever-like symptoms (sneezing, itchy nose and eyes), asthma and eczema.

What should be done for these allergic patients?

It is best to prove allergy to house dust mite through skin testing. Sometimes we know about it through contact—for example, having a reaction to sleeping on a dusty old mattress in another place. The best way to reduce allergic symptoms is to reduce your exposure to the mites and follow the steps of management.

Preventive steps

General points

- Direct sunlight kills the mites, so let lots of sunlight into the house.
- Keep the house well ventilated and as free of dampness as possible.
- Keep pets out of the house.

Bedding

- It is best to cover mattresses, pillows and quilts with premium-grade dust mite covers (your local pharmacist or the asthma foundation can advise you).
- Avoid feather doonas and pillows.
- Use bed linen, blankets and doonas that can be washed regularly. Wash them in hot water at 55°C or more.
- Electric blankets are considered to be okay.

Carpets

It is best to have no carpet, especially in the bedroom. Polished boards, linoleum, slate or tiles are preferred. For very sensitive patients it is advisable to remove any existing carpet. If carpet is necessary, keep it as clean as possible. Vacuuming stirs up the dust so the patient should avoid this task or wear a special protective mask. Movable floor coverings should be shaken and cleaned outside the house.

Soft furnishings

- Keep soft furnishings to a bare minimum in the bedroom.
- Avoid heavy curtains and wash the curtains regularly.
- Window blinds such as vertical blinds are preferable.

Soft toys

Avoid soft toys in the sleeping area. If you can't, have only a few and wash them regularly. Putting them in the deep freeze overnight (in a freezer bag) once a fortnight will kill the mites.

Living area

Avoid upholstered furniture if possible. It is preferable to use wipeable furniture such as leather, vinyl and wood.

Other tips

When dusting, use damp dusting in preference to a feather duster. Avoid dust collectors such as wall hangings and beanbags. Any stored clothing, especially jumpers and coats, should be aired in the sun before being worn.

Special insecticides (acaricides) are often used to destroy mites in carpets but they are expensive, of doubtful value and, on balance, not recommended.

Best tips

- Use top-grade dust mite covers for bedding.
- Wash bed linen in hot water at or above 55°C.
- Avoid carpet and soft furnishings (if allergy is severe).

Hypertension

What is hypertension?

Hypertension means high blood pressure and is present when your blood pressure is greater than normal levels for the population. There are two types of blood pressure (BP) that we measure: *systolic* and *diastolic*. The systolic BP is the pressure at the moment the heart pumps the blood into circulation and the diastolic BP is the pressure when the heart relaxes and takes in blood. Both levels of pressure are very important.

BP is measured in millimetres of mercury (mm Hg). We have hypertension if our pressure is greater than either the systolic pressure (140) or the diastolic pressure (90) which are the standard uppermost limits of normal. Very high BP is one more than 180 systolic or 110 diastolic.

What are the normal and recommended levels of BP?

The normal BP for all adults over 18 years is one that is less than 130 systolic and 85 diastolic. A pressure between 130/85 and 140/90 is regarded as in the higher level of normal. The normal BP for a person over 65 years is one that is less than 140 systolic and 90 diastolic so an extra 5 mm pressure is acceptable for an older person. It is vitally important for people with diabetes and kidney disease to keep the BP below 130 and 85.

What causes it?

In most cases (95%) there is no identifiable cause—it just happens that way. The pressure in our arteries is high because the heart pumps too hard and the arteries are too narrow. This is like the pressure in a hose—the further we turn up the tap and the narrower the hose, the greater the pressure. Sometimes hypertension is caused by a kidney problem or some other rare disorder. Drinking excessive amounts of alcohol is an important cause.

Who gets hypertension?

Anyone can get it. It is very common and affects about 15–20% of the adult population in Western countries. BP tends to rise as we get older. However, most people are not aware they have it. It rarely gives warning symptoms.

What are the symptoms?

Usually there are none. People with very high BP can feel quite well. It is rare to feel headache, palpitations or sick until complications set in.

What are the risks of having it?

Hypertension is often referred to as the 'silent killer'. You are more likely to have strokes and heart attacks than people with normal BP. The risk increases as the BP rises. With time the pressure can cause the heart and kidneys to wear out, that is heart failure and kidney failure. By keeping the BP within normal limits, we reduce the risks of strokes and heart trouble, including coronary attacks and kidney failure.

What is the treatment?

Medication (called *antihypertensive* medication) can reduce your high BP, but it might be possible to lower your BP to normal by leading a sensible, healthy lifestyle. This self-help may avoid a lifelong commitment to drugs.

Self-help

- *Diet*: Follow a nutritious, low-fat diet.
- *Salt*: Put away the salt shaker; use only a little salt with your food.
- *Obesity*: Aim to keep to your ideal weight.
- *Alcohol*: Aim for either none or only small amounts (maximum of two standard drinks a day).
- *Stress*: Avoid stress and overwork. Consider relaxation or meditation classes.
- *Exercise*: Exercise regularly, aim for 30 minutes of daily activity such as walking.
- *Smoking*: This does not seem to cause high BP, but is a risk factor for heart disease—so please stop.

Medication

If natural measures do not bring down your BP, tablets will be necessary. The tablets act by softening the strong pumping action of the heart or relaxing the tight arteries or reducing the body chemicals that control your BP. The tablets must be taken regularly as directed and never stopped unless advised by your doctor.

How often should your BP be checked?

If your BP is found to be normal it should be measured every 1–2 years by your doctor. If you are over 40 years, it is wise to have it checked every year because it tends to creep up with age. Women on the pill need to be checked regularly.

Immunisation of children

The importance of immunisation

The use of vaccines during childhood has dramatically reduced the number of deaths from the basic infectious diseases. Immunisation is vital preventive medicine, and parents have a responsibility to make sure their children are immunised. Whenever we have an infection, our bodies automatically defend themselves by producing substances called *antibodies* that neutralise the infection. These antibodies remain in the body to fight further contact with germs, and this protection is called *immunity*. A vaccine works by stimulating the production of antibodies to give us this immunity.

What diseases do we vaccinate against?

Diphtheria

Diphtheria is a bacterial infection that causes a membrane to grow across the throat and block the airway. It is now rarely seen because of the successful immunisation program.

Whooping cough

Whooping cough (*pertussis*) is a serious bacterial infection of the chest that causes a dramatic cough in children as they struggle to breathe. It is still a common infection in our community, but immunisation has made it a milder disease. Children who have not been immunised can get severe attacks.

Tetanus

This is another bacterial infection; it causes a severe infection known as *lockjaw*. Although cases still occur, it is rare because of our awareness of the problem.

Polio

Polio, once a common disease, is a severe viral infection of the nervous system. It causes paralysis of parts of the body. At first the vaccine was given by injection, but now is in the form of small liquid drops given on a spoon.

Hepatitis B

Hepatitis B vaccine should commence just after birth with boosters, usually combined with other vaccines.

Measles

Measles is a very serious viral illness that has not been well controlled, mainly because only 70% of Australians get immunised against it. It can cause serious brain damage (due to encephalitis) in its victims. An injection given at 12 months and then a booster at 10 to 16 years provide immunity. The vaccine is now combined with mumps and rubella.

Mumps

Mumps is one of the well-known infectious diseases of childhood that is now being controlled with immunisation. It can infect the brain (meningitis and encephalitis) and the testicles in young men.

Rubella

Rubella or German measles is not a serious disease except if contracted during the first 3 months of pregnancy, when it can cause serious problems in the baby. Immunisation is available for all children at 12 months and then during early adolescence for schoolgirls. Being immune to rubella takes a great load off the mind of any expectant mother.

Haemophilus influenza type B (HiB)

This is a serious bacterial infection that caused many deaths from meningitis and epiglottitis. The vaccine was introduced in 1992, and infections are now rarely seen.

Meningococcus

Vaccination at 12 months is given to immunise against the C strain of the potentially deadly meningococcal infection.

Varicella (chickenpox)

The vaccine is recommended as a single dose at 18 months but can be given from 12 to 13 months. It should be considered at 10 to 13 years if there is no history of varicella.

Pneumococcus

Pneumococcus causes respiratory infections such as pneumonia. Vaccination is recommended for children as a three dose series; extra doses are required for those at risk.

Are there any side effects?

The vaccines usually are free of side effects, although a mild reaction can occur. Sometimes an injection can cause the child to be quite ill, and it usually is the whooping cough (pertussis) component. Your doctor will be able to advise about this.

Australian standard vaccination schedule (recommended by the National Health and Medical Research Council, Australia)

Age	Vaccine
Birth	hepatitis B
2 months	DTP[a], hepatitis B, haemophilus, polio[b], pneumococcus
4 months	DTP, hepatitis B, haemophilus, polio, pneumococcus
6 months	DTP, polio, hepatitis B (or at 12 months), pneumococcus
12 months	measles, mumps, rubella, haemophilus, hepatitis B (or at 6 months), meningococcal C
18 months	varicella
Before school entry (4 years)	DTP, polio, measles, mumps, rubella
10–13 years	consider hepatitis B and varicella
Before leaving school (15–19 years)	Boostrix[c], polio

(a) diphtheria, tetanus and pertussis (whooping cough), known as 'triple antigen'
(b) sabin vaccine
(c) Boostrix—adult diphtheria, tetanus, pertussis

Impetigo

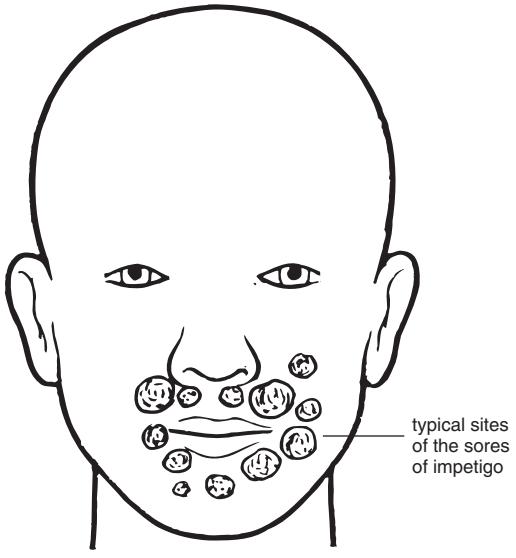
Impetigo, more commonly called 'school sores', is a very contagious (catching) skin infection. It can occur anywhere on the skin but usually affects the face, particularly around the mouth and nose. Impetigo is most common in infants and children, particularly those just starting school, but can affect adults.

What is the cause?

Impetigo is caused by two strains of bacteria, called *Streptococcus* and *Staphylococcus aureus*, which is the most common cause. Those with sensitive skin, lowered resistance from illness, poor hygiene and poor nutrition have an increased risk of infection. The risk also increases with warm, humid weather and in crowded living conditions.

What are the symptoms?

Impetigo usually commences with a small patch of tiny blisters around the mouth and nose. These break open to form a weeping area of red skin which soon develops a golden crust. It then spreads from the edges and forms new infected patches. This spread can be very rapid.



Impetigo can occur in other areas on the body, especially around the buttocks, legs and arms. The blisters and crust of impetigo are not painful but they may itch. A skin swab and culture will confirm the responsible germ.

What are the risks?

It is not a serious disease although infection with *Streptococcus* can lead to a serious kidney disease called glomerulonephritis. It can be very serious if it occurs in newborn infants when the rapidly spreading infection will cause them to become very ill.

What should be done to prevent spread?

It is important to treat impetigo as soon as possible and to take measures to prevent its spread within the family and to others. Patients should have their own towel, soap and face towels and never share them (disposable paper towels are useful). All family members should use an antibacterial soap. Fingernails should be cut short and the picking of sores avoided. If necessary, cover the sores with gauze and tape with a watertight dressing to keep hands off them. Infected adults should wash their hands thoroughly in an antiseptic before preparing food. Keep bed linen, clothes and towels separate. Children should be kept away from school or other childcare settings until the skin has completely healed.

What is the treatment?

Your doctor will prescribe an antibiotic or antiseptic (which is preferable) lotion. It is important to wash the affected area three times daily with an antibacterial soap and gently sponge off any crusts. Then apply an antiseptic lotion such as chlorhexidine or povidone-iodine (Betadine). Wash the hands carefully after this treatment. This method should cure most mild cases. A topical antibiotic ointment such as Bactroban may be prescribed. Apply the ointment with a cottonwool swab. For more severe cases, penicillin-type antibiotics taken by mouth will be needed.

Impotence (erectile dysfunction)

What is erectile dysfunction?

Erectile dysfunction refers to the persistent inability of a man to get or maintain an erection of the penis sufficiently to have sexual intercourse. Most adult men have probably experienced a short period of temporary impotence at some time. This is usually due to a psychological rather than a physical problem and is not a cause for concern.

How common is the problem?

It is common and affects at least 3 in 10 males at 45 years and 2 in 3 males at 70 years.

What are the causes?

Most cases of erectile dysfunction (up to 75%) have a physical (organic) cause while the rest have a psychological (functional) cause.

Physical causes

- ageing
- alcohol excess
- chronic illness
- diabetes
- nervous system disorders (e.g. stroke)
- decreased circulation to penis
- drug reactions, for example:
  — marijuana, cocaine, narcotics
  — heavy smoking (4 times the risk by age 50)
  — sedatives, tranquillisers, antidepressants
  — blood pressure drugs
- hormone irregularities
- surgery (e.g. prostate surgery)

Psychological causes

- stress and fatigue
- anxiety or depression
- marital disharmony
- negative thoughts about sex and sexual performance
- guilt feelings
- ignorance about sexuality
- situational stresses, such as presence of other people in the home (e.g. in-laws)
- performance anxiety

Sometimes we simply do not know what causes impotence. You can get an idea of whether you are functional by being aware of erections during sleep (which usually occur 3–5 times during the night and last for about 90 minutes) or morning erections or erections through masturbation.

What about getting old?

Although the risk of impotence increases with age, it is not inevitable. Most men keep the ability to get an erection, although more stimulation is usually required.

What tests need to be performed?

Tests will include blood tests and possibly special investigations for function of your penis. Special sleep studies on erections during sleep can be performed.

How can it be prevented?

- Careful treatment of any medical problem such as diabetes is important.
- Avoid drugs of addiction, including common 'social' drugs.
- Discuss the effects of any medicines with your doctor.
- Do not have more than 2 standard alcohol drinks a day.
- Cut down smoking.
- Promote sexual feelings:
  — Have good communication with your partner.
  — Talk over any concerns.
  — Choose a good atmosphere for lovemaking.

What is the treatment?

Lifestyle

All patients should be advised to reduce any high alcohol consumption and refrain from smoking (cigarette, cigar and pipe). Significant stress and overwork should be attended to.

Counselling for psychological causes

This will involve brief sexual counselling for which you may be referred to a specialist clinic. It is important to attend with your partner.

Hormone treatment

Hormones will only be given if blood tests find that you are lacking a certain hormone necessary for sexual function. This is very uncommon.

New anti-impotence drugs

There are modern drugs that taken by mouth will restore the ability to get an erection upon sexual stimulation. They work by neutralising the enzyme in the penis that makes it go limp. This results in increased blood flow to the penis. Viagra was the first of these drugs—a 50 mg tablet is taken about one hour prior to intercourse. This dose can be doubled or halved according to the response. Newer drugs in this class include Cialis and Levitra. There will be other drugs in the future. These drugs do not invariably work as their effectiveness is related to the extent and severity of the problem.

Injections

A way to treat physical impotence is to give an injection of a special substance into the penis to achieve an erection. If a test dose works, you will be able to give yourself injections (up to a maximum of 3 a week) before you intend to have intercourse. The injection in common use is alprostadil (Caverject).

Other methods

There are other ingenious ways to achieve intercourse should your impotence be permanent. These include:

- a vacuum device to make the penis erect
- surgery to implant a firm but flexible device
- surgery to implant an inflatable device

Infant colic

What is infant colic?

It is the occurrence in a well baby of regular, unexplained periods of inconsolable crying and fretfulness, usually in the late afternoon and evening, especially between 2 weeks and 16 weeks of age. No cause for the abdominal pain can be found, and it lasts for a period of at least 3 weeks.

It is very common and occurs in about one-third of infants.

What are the typical features?

- baby between 2 and 16 weeks old
- prolonged crying—at least 3 hours
- crying worst at around 10 weeks of age
- crying during late afternoon and early evening
- occurrence at least 3 days a week
- child flexing legs and clenching fists because of the 'gut ache'
- child gets better naturally with time

The myths of infant colic

It is important for concerned parents to know that the colic is *not* caused by the mother's or family's anxiety, by artificial feeding or by food allergy.

Unfortunately, the problem does tend to cause tensions in the family, but it must be emphasised that the baby will thrive, the condition will pass away and the parents are not responsible for the colic.

Some cautionary advice

This can be a danger time for child abuse by frustrated parents, and so please speak to someone about any troublesome feelings. Remember that it is no one's fault and it will soon settle. You must avoid using fad diets or herbal treatments for the baby.

What is the treatment?

- Use gentleness (such as subdued lighting where the baby is handled, soft music, speaking softly, quiet feeding times).
- Avoid quick movements that may startle the baby.
- The advice from and close contact with a maternal or child health nurse is most helpful.
- Advice from the Nursing Mothers Association is helpful.
- Make sure the baby is not hungry—underfeeding can make the baby hungry.
- If the baby is breastfed, express the watery foremilk before putting the baby to the breast.
- Provide demand feeding (in time and amount).
- Make sure the baby is burped and give posture feeding.
- Provide comfort from a dummy or pacifier.
- Provide plenty of gentle physical contact.
- Cuddle and carry the baby around (e.g. take a walk around the block).
- A carrying device such as a 'snuggly' or a 'Meh Tai Sling' allows the baby to be carried around at the time of crying.
- Make sure the mother gets plenty of rest during this difficult period.
- Do not worry about leaving a crying child for 10 minutes or so after 15 minutes of trying consolation.

Mother's diet

The breastfeeding mother's diet has been a controversial issue, but some mothers have found that cutting out cow's milk, eggs and spicy foods has helped their babies' colic. A trial of avoiding these foods in the diet is worthwhile.

Drug treatment

Drugs are not generally recommended, especially as some may sedate the baby. However, for severe problems your doctor can prescribe something to help. Infacol Wind Drops may be soothing. Fortunately the problem is not serious and soon gets better.

Infertile couple

What is infertility?

Infertility is the inability to conceive after a period of 12 months of normal unprotected sexual intercourse; that is, not getting pregnant after a year of trying.

A more preferable term is *subfertility*, which is the situation where a couple has problems achieving conception. *Sterility* is the extreme case when conception can never occur.

What is necessary for pregnancy to occur?

Three basic features are essential:

1. The right number of healthy sperm has to be placed in the right place at the right time.
2. The woman must be *ovulating*; that is, producing healthy ova (eggs).
3. The tubes must be patent and the woman's pelvis sufficiently healthy to allow fertilisation of the egg and then implantation in the uterus.

What are the statistics?

About 1 in 10 couples are infertile. The incidence increases with age, so that it gradually increases after the age of 32. About 100 000 couples in Australia have this problem. 100 infertile couples will include:

- 45 with a female factor
- 40 with a male factor
- 15 with an unknown factor

In about 25% there is a combined female and male factor.

What are the main specific causes?

- faulty egg or sperm production that can be related to previous infections (such as mumps) or drugs (such as cancer treatment drugs and anabolic steroids)
- blockages or other structural problems of the reproductive tract that could be congenital (present from birth) or acquired from infections
- psychological factors, such as stress, anxiety or adverse lifestyle
- problems with intercourse and the timing of intercourse

What can be done?

If a couple has not conceived in 12 months, they should both visit their doctor. At first the doctor will work out whether intercourse is frequent enough and suitably timed, and determine whether there is a sexual difficulty such as partial or occasional impotence or premature ejaculation. If a correctable condition comes to light, the couple will be given advice and told to try again for several months. If there is still a problem, the main tests that will be done are the sperm test in the male and the ovulation tests in the female.

The sperm test

The male is required to provide a complete ejaculate of semen, preferably by masturbation, after at least 3 days abstinence from sex. This fluid is placed in a clean bottle, kept warm and examined under the microscope within 1 hour.

Normal values are more than 2 mL with a sperm concentration of more than 20 million per millilitre and more than 50% normal forms and motility.

Ovulation tests

Ovulation can be worked out from the history of the nature of the periods, the cervical mucus and body temperature. Measurement of hormone levels in the blood on day 21 of the menstrual cycle will indicate whether ovulation is occurring.

Other special tests

If these tests are normal, there are many others (including special X-rays of the tubes and uterus of the female) that can be performed. However, your doctor will refer you to a specialist for management.

What is the outlook?

The outlook for subfertile couples improves all the time. Current specialised treatment helps 60% of couples to achieve pregnancy.

The emotional trauma of infertility

Infertility is certainly associated with deep emotional problems that can flare up as crises from time to time. Unfortunately the emotional stress includes taking blame or placing blame on the other partner, and results in guilt feelings. Common feelings of infertile couples are surprise, denial and fear at first, and then frustration, anger, guilt, resentment, depression and loss of self-esteem. It cannot be emphasised enough that you should talk openly and honestly about your feelings and seek the help of a counsellor such as your family doctor.

Influenza

What is it?

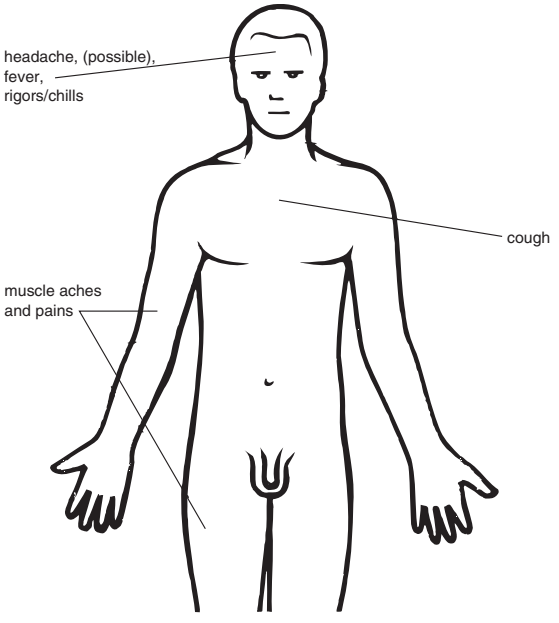
Influenza, usually called *flu*, is a respiratory infection caused by a virus, which is a tiny germ that cannot be seen even under an ordinary microscope. There are several kinds of influenza virus, and they seem to keep changing just when we seem to be immune to them. However, they all produce a similar illness.

What are the symptoms?

The diagnosis of influenza is made on the presence of 6 of the following 8 criteria during an influenza epidemic:

- sudden onset (less than 12 hours)
- fever
- dry cough
- rigors or chills
- muscle aches and pains
- prostration or weakness
- absence of upper respiratory signs
- influenza in close contacts

These may be followed by a sore throat, a cough and a runny nose.



Influenza

How is it caught?

Influenza usually comes in epidemics, when it spreads from one person to another in the spray from coughs and sneezes (called *droplet infection*). The virus enters the nose or throat and may spread to the lungs. It is extremely infectious.

How is it different from the common cold?

Many people refer to the common cold (which is more common) as 'the flu', but influenza is a more serious respiratory infection that usually makes the victim sick enough to go to bed. Flu tends to go to the chest and makes the whole body ache; the common cold usually only affects the upper respiratory passages, causing a runny nose, sneezing and a sore throat.

What are the risks?

The main risk of influenza is that the infection may spread to the lungs, causing bronchitis or, worse still, pneumonia. Such complications are rare, and are more likely to occur in people with poor health (especially those with a chest complaint), in the elderly and in heavy smokers.

Although influenza makes people quite ill, it is usually not dangerous. Feeling depressed after the flu is a common problem.

What is the treatment?

Like any viral infection, influenza must run its course. Symptoms can be eased and complications prevented by proper care and common sense.

Self-help

- *Rest*. Just as a broken leg needs rest, so does the body overcome by flu. Go to bed as soon as the symptoms begin and stay there until you feel better and the fever goes away.
- *Analgesics*. Pain-killers such as codeine compound tablets are more effective than aspirin at relieving symptoms, especially cough and aching. However, the choice is an individual preference as some people respond well to aspirin (adults only) or paracetamol alone. Make sure you are not allergic to the particular analgesic.
- *Fluids*. You lose a lot of body fluid, especially with a fever, so drink as much water and fruit juice as possible (at least 8 glasses a day).
- *Special remedies*. Any remedy that makes you feel comfortable is good. Freshly squeezed lemon juice mixed with honey is very good. Some people find a nip of brandy or whisky with the fruit juice soothing.

The flu will usually last 3–4 days, sometimes longer. Consult your doctor only if you are concerned about complications. Your doctor may prescribe one of the new anti-influenza drugs. Routine antibiotics are not helpful—they are reserved for complications. Some people find that taking 1–2 grams of vitamin C each day helps recovery.

What about prevention?

The influenza vaccine appears to help some people, but vaccination cannot guarantee total immunity as the strain that sets off the epidemic may be new. Vaccination is worthwhile for patients at risk: diabetics, those with chronic lung disease and heart disease, those over 65 years, and those whose occupation (working with crowds or sick patients) puts them at risk in an epidemic.

Ingrowing toenails

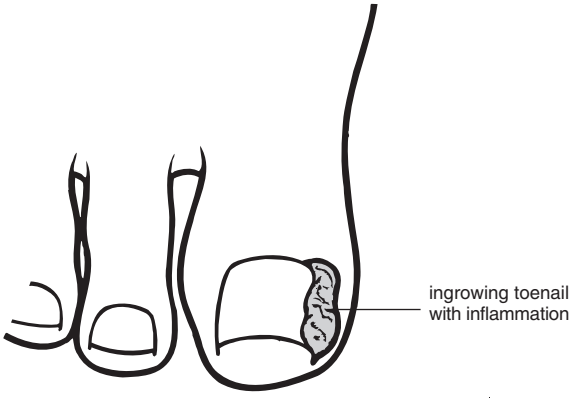
An *ingrowing toenail* occurs when the nail of the big toe curves under at the sides of the nail so that it grows into the skin.

What is the cause?

The two main contributing causes are the wearing of tight shoes and the incorrect cutting of the nails. If the nails are cut on a curve and down at the sides, the nail edges grow into the skin. A spike of nail gets embedded in the skin and causes problems. However, some people, despite cutting their nails properly and using good footwear, have very wide nails that tend to be ingrown.

What are the symptoms?

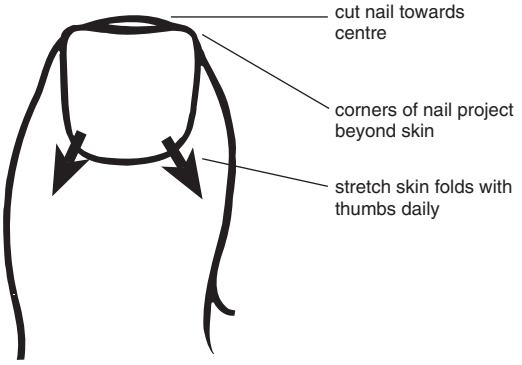
Most ingrowing nails do not cause discomfort, but sometimes when they are not attended to they cause pain, especially if tight shoes are worn. The problem is most troublesome when the skin around the ingrowing toenail becomes infected.



How can ingrowing nails be prevented?

It is important to fashion the toenail so that the corners project beyond the skin. The nail should be cut across so that the cuts slope towards the centre of the nail and not down towards the edges.

Each day, after a shower or bath, use the pads of both thumbs to stretch the nail folds at the base as shown.



What is the treatment?

If you have an ingrowing toenail, cut the nail as described and be careful not to leave spikes at the edges. It is especially important not to dig the scissors into the ingrowing corners and injure the tissues. This injury, which tends to cause minor bleeding, often leads to a nasty infection that can take weeks to heal.

Make sure you wear good fitting shoes and keep the area clean and dry at all times.

Your doctor may choose to use one of several methods to remove the ingrowing nails, including removing the wedge of nail or skin fold so that the leading edge of the nail lies free.

Iron deficiency anaemia

What is iron deficiency anaemia?

Iron is one of the vital chemicals of *haemoglobin*, which is the red pigment in red blood cells. If iron is deficient in the body, the production of haemoglobin is reduced, the red cells are therefore reduced or weak, and this is known as *anaemia*.

What are the symptoms of anaemia?

There may be no symptoms at first, then tiredness, weakness, breathlessness, faintness and loss of interest in things are the main symptoms. Pallor, especially of the lining of the lower eyelid, is a sign.

What are the causes?

Lack of iron is due to 1 or more of 3 main reasons:

1. not enough iron in the diet, especially in growing infants and vegetarians
2. poor absorption of iron from the bowel
3. excessive loss of blood, such as menstrual loss, bleeding from cancer or ulcers in the bowel or stomach or from haemorrhoids (piles)

Who is likely to get anaemia?

- premature infants
- children, especially those 6–36 months old with a diet high in cow's milk and low in iron-containing foods
- women, especially those with heavy periods and lack of dietary iron (3 in 10 have low iron reserves)
- the elderly (e.g. through poor diet and chronic illness)
- vegetarians
- athletes, who lose iron in sweat and urine

Anaemia can also develop in those with rapid growth spurts (e.g. adolescents). Those taking certain drugs, such as aspirin or anti-inflammatories, are prone to slow gastric bleeding, which can lead to anaemia. The commonest cause of iron deficiency in the world is from hookworm infestation of the bowel in tropical areas.

How is anaemia diagnosed?

Anaemia is diagnosed by taking a blood sample and sending it to a laboratory for testing. Iron deficiency can be diagnosed by the appearance of the blood and size of the cells. If this is so, further blood is taken to measure the level of iron stores in the body.

What are the main problems?

Iron deficiency anaemia is unlikely to be fatal, but the cause is the concern. In older adults the possibility of bleeding from cancer of the bowel or stomach must be considered. The ideal tests for this are looking directly into the empty organs with a viewing scope. The outlook for those with iron deficiency anaemia is usually very good.

What is the treatment?

The most important thing to do is correct the underlying cause. If investigations give the all clear for a serious bleeding problem, it is likely that the cause is lack of iron in the diet and this is easily corrected. Sometimes a blood transfusion is necessary to correct severe anaemia, especially if you are facing surgery.

Medication

Iron supplements: Iron tablets are preferred to injections of iron but have a reputation for causing gastric upsets such as indigestion and nausea. It needs to be in the ferrous (not ferric) form.

- Take 1 tablet a day or 2 tablets every second day.
- Take iron on an empty stomach (e.g. 30 minutes before meals).
- Take vitamin C to help absorption.
- Wait 2 hours before taking other medications such as antacids.
- Take iron tablets with a small amount of food (not milk) if they upset the stomach.
- Continue the tablets for at least 3 months.

In children iron is best given daily before meals with orange juice (not milk). Liquid iron can discolour children's teeth—drinking it through a straw helps avoid this. Milk intake should be no more than 500 mL a day.

Diet

Adults should limit milk intake to 500 mL a day while on iron tablets. Avoid excess caffeine, fad diets and excess processed bread. Eat ample iron-rich foods (especially protein).

Protein foods

- meats: beef (especially), veal, pork, liver, poultry
- fish and shellfish (e.g. oysters, sardines, tuna)
- seeds (e.g. sesame, pumpkin)
- eggs

Fruits

- dried fruits (e.g. prunes, figs, raisins, currants, peaches)
- juices (e.g. prune, blackberry)
- most fresh fruit

Vegetables

- greens (e.g. spinach, silver beet, lettuce)
- dried peas and beans (e.g. kidney beans)
- pumpkin, sweet potatoes

Grains

- iron-fortified breads and dry cereals
- oatmeal cereal

For better iron absorption, add foods rich in vitamin C (e.g. citrus fruits, cantaloupe, brussel sprouts, broccoli, cauliflower).

Prevention of iron deficiency

- Aim for a well-balanced diet with adequate iron.
- Give bottle-fed infants an iron-fortified formula and iron-containing foods as soon as solids are started.

Irritable bowel

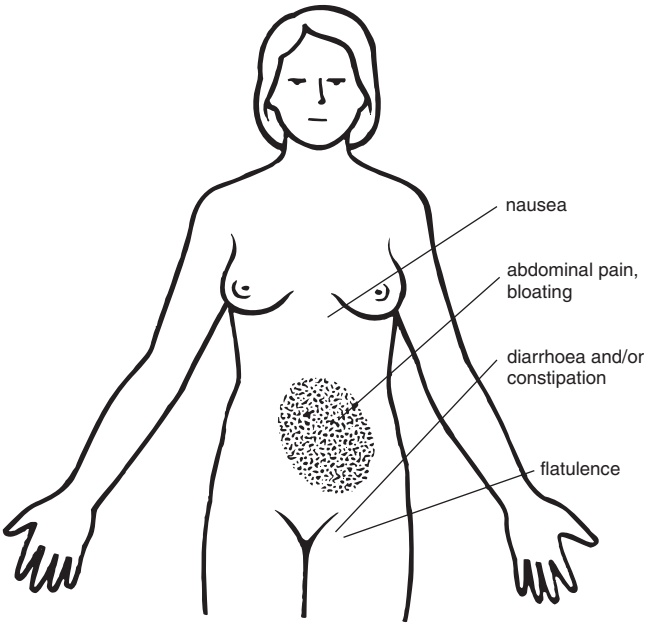
What is it?

An *irritable bowel* (also known as *irritable colon* or *irritable digestive system*) is one that does not work smoothly and causes abdominal problems such as colicky pain and disturbed bowel actions. The bowel is a muscular tube that propels the food along in waves (called *peristalsis*). This muscular action may become overactive and cause spasms or tight contractions rather like a cramp in the leg muscles.

What are the causes?

There is no clear-cut proven cause but one theory is that an important factor is emotional stress, especially in those people who tend to 'bottle things up inside'. However, there is no proof supporting this theory. Possible causes or aggravating factors are:

- infection of the bowel
- food irritation (e.g. spicy food)
- food allergy (e.g. milk, cream)
- lack of bulk (fibre) in the diet
- overuse of laxatives
- pain-killing drugs and antibiotics
- smoking
- salicytes or related chemicals such as aspirin, food colourings and fresh pineapple



Symptoms of irritable bowel

What are the symptoms?

The main symptom is a vague discomfort or a cramp-like pain in the abdomen (in the centre or lower left side). This pain is usually relieved by passing wind or by a bowel movement.

Diarrhoea or constipation may occur, and sometimes the motions will be like small, hard pellets. Mucus may also be passed from time to time.

You may also feel mildly nauseated, off your food, bloated or flatulent (windy). There may also be a sensation of incomplete emptying of the bowel.

How common is it?

At least 1 person in every 100 has it, and many simply learn to live with it. Some authorities believe that up to 30% of the population have it to some degree. It can develop at any age but it usually begins in the late teens or early 20s. It is likely to affect twice as many women as men.

What are the risks?

The irritable bowel is harmless, but it is common for those with it to worry that they have cancer. It is usual to carry out investigations to ensure that there is no disease in the bowel. There is no cure and the problem may come and go for years.

What is the treatment?

Self-help

Anyone with an irritable bowel should try to work out the things that make the symptoms worse. If you recognise stresses and strains in your life, try to develop a more relaxed lifestyle. You may have to be less of a perfectionist in your approach to life.

Try to avoid any foods that you can identify as causing the problem. You may have to restrict or cut out smoking and alcohol. A high-fibre diet may be the answer to your problem. This can be helped by adding 2 teaspoonfuls of unprocessed bran to your diet each day if increased fibre and fluids have not quite settled the problem.

Medical help

If self-help measures are not controlling the problem, your doctor will be able to give you medicine to settle the painful spasm of an irritable bowel. You should avoid taking any medicines not recommended by your doctor.

Kidney stones

What are kidney stones?

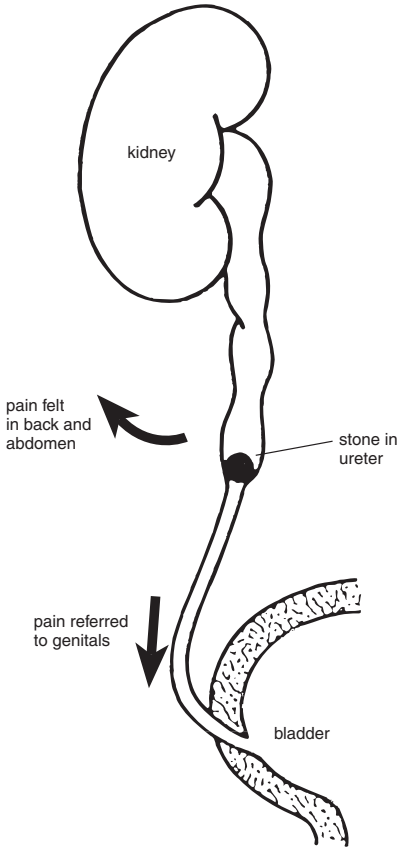
Kidney stones are small hard 'stones' that form in the kidney and sometimes move into the ureter. They vary in size from a grain of sand to a golf ball and in number from one to several. They are also referred to as *renal calculi* or *urinary calculi*.

How are they formed?

A stone usually begins as a tiny, sand-like speck of material in the outlet flow of the kidney. Minerals in the urine, especially calcium, then build on the speck in a similar way to which pearls grow in oyster shells. Most are flushed out, but some can remain and grow over a period of many years. Excessive amounts of minerals in the urine, such as calcium, uric acid and oxalate, make stone formation likely—as does concentrated urine, which happens in people who drink only small amounts of fluid.

Who gets kidney stones?

Anyone can get them. About 1 person in every 400 suffers from the problems they cause. They have been found in Egyptian mummies from 6000 years ago. The main ages affected are from 20 to 50 (the peak age is about 30) and males are three times more likely to get them. Risk factors include pregnancy, a low-fibre diet, hot climates, 'holding on' to a full bladder, such as happens with troops in battle, and kidney infections.



What are the symptoms?

There may be no symptoms, especially with tiny stones that flush out or with large stones that are too big to pass, although some of these may cause backache in the kidney area. However, when small stones pass into the long muscular tube called the ureter, excruciating pain called colic usually develops. Colic usually comes on suddenly and lasts until the stone is passed into the bladder; this can take a few hours (but usually less than 8 hours). Other symptoms include vomiting and small amounts of blood in the urine.

What causes the pain?

The pain of ureteric colic is caused by movements of the stone in the ureter which stretches the narrow muscular tube and causes intense spasm.

What is the treatment?

The treatment of severe colic is a pain-killing injection, which can be a strong narcotic, or one of the anti-inflammatory drugs. An anti-inflammatory drug, in the form of oral tablets or suppositories, may be prescribed after the attack settles. The urine is tested and X-rays are taken to find any stones and to check the structure of the urinary tract.

What are the risks?

Although most stones either remain in the kidneys causing no harm or pass in the urine, some may get stuck in the ureter and require a surgical procedure to remove them. Some kidney stones may cause infection. Very large, troublesome stones may require shattering with special shock waves in a treatment called lithotripsy.

How can the problem be prevented?

Prevention applies mainly to those who have had an attack, especially recurrent attacks. Your doctor will organise tests to see if you have too much calcium or troublesome acids in your blood or urine and, if so, will advise you accordingly.

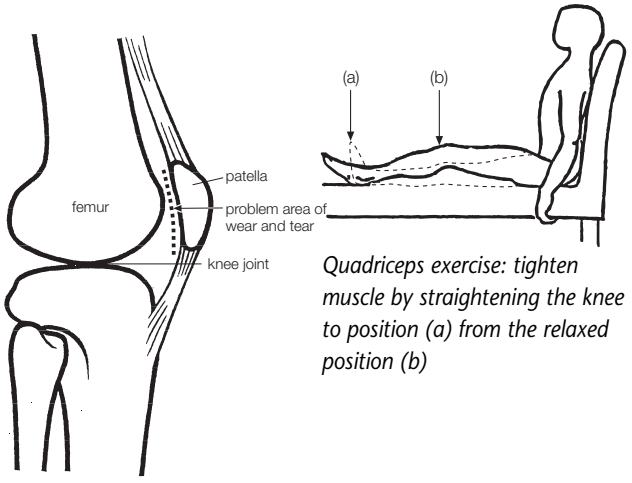
Dietary advice includes the following:

- Drink at least 2 litres of water every day.
- Reduce uric-acid-containing foods, especially beer, red meat, red wine and organ meats (brain, kidney, liver, sweetbread).
- Reduce oxalate-containing foods, especially chocolate, rhubarb, vitamin C tablets, tea, coffee and other cola drinks.
- Avoid processed meats, organ meats, yeast spreads and high salt foods. Restrict salt intake.
- Reduce your animal protein consumption: restrict yourself to one major meat meal a day.
- Have a high-fibre diet—plenty of vegetables and fruit.

Knee: anterior knee pain

What is anterior knee pain?

It is a variety of knee pain in which the discomfort is felt in the front of the knee in and around the kneecap (called the *patella*). The usual cause is a relatively non-serious condition called *chondromalaca patella*, also known as the *patello-femoral syndrome*. There are other causes of anterior knee pain but this is by far the most common and needs to be distinguished from arthritis of the knee joint. It is one of the most common problems in sports medicine and is sometimes referred to as 'jogger's knee', 'runner's knee' or 'cyclist's knee'.



Quadriceps exercise: tighten muscle by straightening the knee to position (a) from the relaxed position (b)

How does it happen?

The basic cause is repeated *flexion* (bending) of the knee in activities such as sport, climbing stairs and bushwalking, especially on uneven ground. Usually there is no history of a preceding injury but it can follow an accident such as falling directly and heavily onto the kneecap. It is a type of wear and tear on the surface under the patella which results in the smooth surface of cartilage becoming soft and stringy and sometimes inflamed. People who have an abnormal shape or position of the patella are more likely to develop the condition.

Who gets anterior knee pain?

It may affect people at any age but is more common in adolescents or young adults, an age group associated with active participation in sports.

What are the symptoms?

The main symptom is pain or an ache in the front of the knee which sometimes can be felt deep in the knee. The pain may come on slowly 'out of the blue' and then gradually get worse with activities such as running or going up and down stairs.

The pain is worse with:

- walking up and down stairs
- running (especially downhill)
- walking on rough ground
- squatting
- prolonged sitting

A cracking sensation (called *crepitus*) or clicking or clunking on bending the knee is often heard. Occasionally the knee may give way. Knee swelling is relatively uncommon.

Movie-goer's knee

This condition is sometimes called 'movie-goer's knee' because sufferers prefer to use an aisle seat to stretch the leg out straight into the aisle. These people get a diffuse ache when they sit for long periods with the knee bent.

What is the outlook?

The outlook is very good and a steady recovery can be expected with attention to relatively simple guidelines. Elite athletes require more guidance from therapists if they wish to remain competitive. Surgery is rarely necessary. X-rays of the knee are usually normal.

What is the management?

The key approach is to rest from aggravating activities such as running, cycling or excessive climbing of stairs and to retrain muscles, especially the quadriceps. Correction of any biomechanical abnormalities of the patella or the feet with the use of taping, orthotics or footwear will be important. Referral to a sports medicine therapist may be necessary to supervise rehabilitation.

Acute inflammation

This is relieved by relative rest and the application of icepacks. Sometimes a short course of non-steroidal anti-inflammatory drugs will be necessary; otherwise aspirin or paracetamol will control pain.

Taping

If the patella is 'off-centre', taping of the patella will help relieve acute pain.

Muscle retraining

Your doctor or therapist will advise on the most appropriate exercises. For straightforward cases of anterior knee pain simple quadriceps exercises can be very effective.

Quadriceps exercise (see figure)

Tighten the muscles in front of your thighs for about 5 seconds (as though about to lift the leg at the hip and bend the foot back but keeping the knee straight). Hold your hand over the lower quads to ensure that they are felt to tighten. This tightening and relaxing exercise should be performed at least 6 times every 2 hours or so until it becomes a habit. It can be done sitting, standing or lying.

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Laryngitis

What is laryngitis?

Laryngitis is a relatively minor infection or inflammation of the larynx (voice box) which is situated at the top of the trachea (windpipe). The problem usually seems a lot worse than it really is because of the marked effect on one's voice.

What is the cause of laryngitis?

It is invariably caused by a seasonal viral infection that also leads to a cold or sore throat. This infection causes inflammation and swelling of the lining of the larynx, including the vocal cords. Laryngitis can also be caused by irritation from cigarette smoke, allergies or excessive use of the voice. Rarely, it can be due to a bacterial infection or a tumour.

What are the symptoms?

The main symptom is hoarseness which may persist for a few days and lead to loss of the voice. Even speaking may be painful. Other symptoms include a flu-like illness, slight fever, 'tickling' in the back of the throat and tiredness.

What can aggravate laryngitis?

Factors that make it worse include smoking, excessive alcohol drinking, exposure to irritants such as pollutants (including fumes), air-conditioning systems and extremely cold weather. Continuing to talk or straining your voice will also aggravate the problem.

What is the expected outcome?

Viral laryngitis gets better spontaneously but can take any time from 3 to 14 days. If the problem lasts longer than 14 days, make sure you have a check-up.

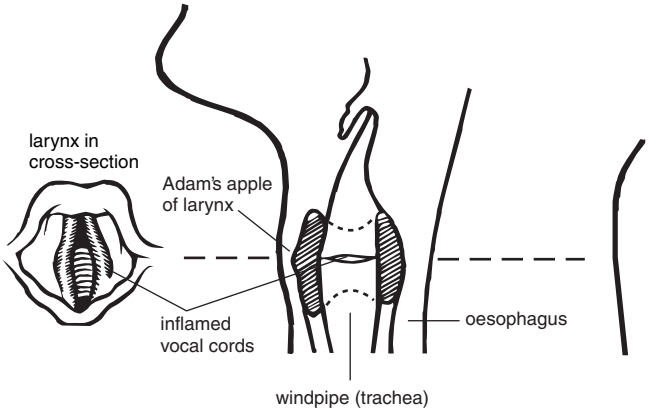
What is the treatment?

It is wise to stay at home, resting yourself and your voice. Use your voice as little as possible and confine yourself to a whisper. Resort to writing notes if it is very troublesome. The more you rest your voice, the more quickly you recover.

Other helpful hints

- Avoid smoking and passive smoke.
- Avoid drinking alcohol.
- Drink ample fluids, especially water.
- Use steam inhalations—5 minutes twice a day provides relief.
- Hot steamy showers also help.

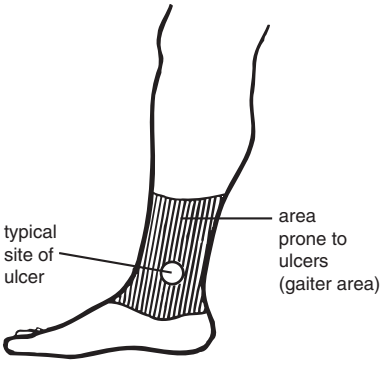
For significant discomfort, use relieving non-prescriptive drugs such as paracetamol, aspirin or cough syrup.



Leg ulcers

What are leg ulcers?

Leg ulcers are abnormal 'holes' that occur in breaks in the skin in the lower leg. Ulcers can occur in any person, but the elderly who have poor circulation are most likely to develop ulcers. They usually occur in the area known as the *gaiter* area of the leg. Twice as many women as men are affected.



What is the cause?

Ulcers are usually caused by a combination of two problems: rather sluggish circulation to the leg and poor drainage due to varicose veins. The further the distance is from the pump (the heart), the more likely the area is to be affected by poor circulation, so that the ankle area is the most vulnerable. The skin becomes thin, and because injuries such as those from knocks or scratches are common here the skin tends to break down and heal poorly. The small crack in the skin may enlarge and gradually become an ulcer.

What are the symptoms?

The ulcer has dead tissue in it and usually weeps. The commonest site is the skin on the inside of the leg just above the ankle. The skin around the ulcer usually becomes red, itchy, flaky and discoloured. Many are not painful, just uncomfortable, but those due to very poor circulation can be quite painful, especially if on the foot.

What are the problems?

Slow healing is the main problem. This is usually not a serious problem, but an ulcer can take months or years to heal in an older person. Ulcers in younger persons usually heal in a few weeks. Those with diabetes or peripheral vascular disease (clogged arteries) heal slowly. Rarely the ulcer is due to an infection or can develop skin cancer and therefore needs careful medical attention.

What is the treatment?

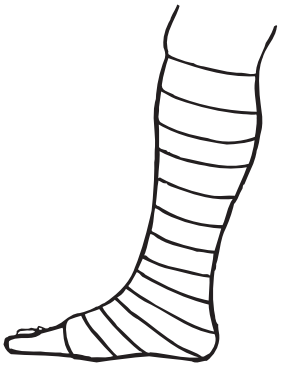
Self-help

The key to healing is to keep the leg elevated as much as possible and also to keep fluid out of the leg, which is helped by a firm bandage. Raising the legs above the level of the heart reduces swelling and quickens healing. Avoid standing for long periods, but undertake moderate walking exercise. Avoid smoking and have a nutritious diet. Be extremely careful not to injure the leg, as the skin of the legs is fragile. Do not scratch, watch out for sharp stakes in the garden and be careful of hot-water bottles.

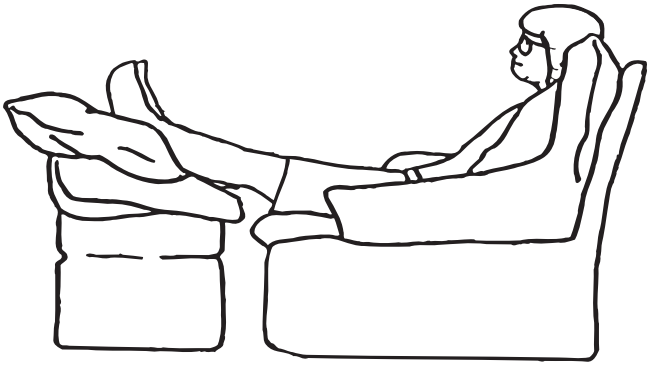
Keep ulcers covered and sterile (ulcers require moisture to heal).

Medical help

The ulcer will require regular dressings to keep it clean and free from infection. Special substances may be added to clean out the debris in the ulcer. A nurse may be able to call regularly to dress the ulcer. It is usually better to keep the dressing on for a few days. You will be provided with a knee-high elastic bandage or a thick elastic stocking to wear during the day. It may be necessary to apply a skin graft to promote the healing.



An elastic bandage helps healing



Rest and elevate the legs as much as possible

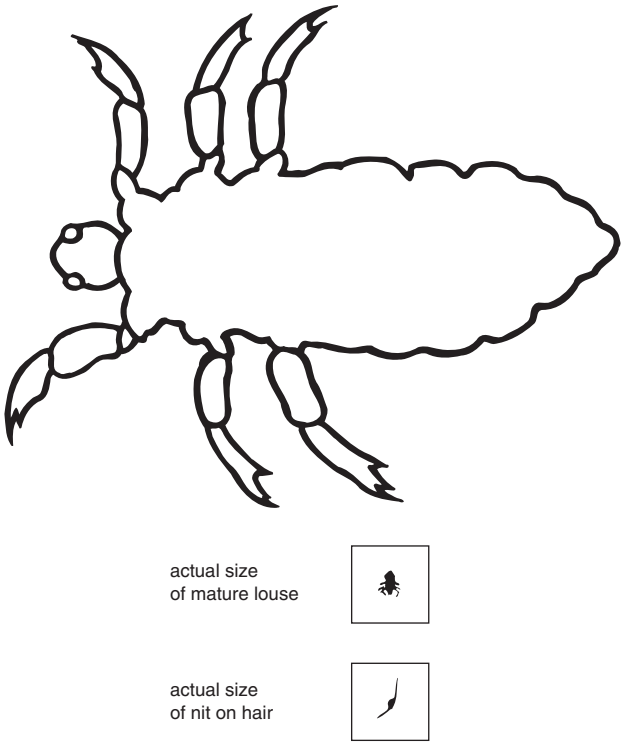
Remember

- Keep your leg elevated as often as possible.
- Keep the leg compressed with a firm bandage, tights or support stockings.
- Avoid further knocks and other injury.

Lice: head lice

What is the cause?

Pediculus humanus capitis is the head louse. This small insect, which lives on human hair, sucks blood from the skin of the scalp. The female louse lays eggs (or 'nits'), which are glued to the hairs and hatch within 6 days, mature into adults in about 10 days and live for about a month.



An adult head louse

How is it spread?

Head lice spread from person to person by direct contact, such as sitting and working very close to each other. They can spread by sharing combs, brushes, headwear, towels and pillowcases, especially within the family. Children are the ones usually affected, but people of all ages and from all walks of life can be infested. It is more common in overcrowded living conditions.

What are the symptoms?

Head lice may cause itching of the scalp, but often there are no symptoms. The white spots can be mistaken for dandruff.

How is it diagnosed?

The finding of lice or nits on the head is the only way to diagnose infestation. The nits are seen as small, whitish flecks securely attached to the base of the hairs, especially behind the ears, on the back of the head and near the forehead. Unlike dandruff, they cannot be brushed off.

What is the treatment?

Topical medication

The best treatment is a permethrin scalp preparation or pyrethrin/piperonyl butoxide (Lyban) foam shampoo or conditioner, which are effective in killing both the lice and eggs. Malathion is also useful, especially if the lice are resistant to permethrin. Lindane is less effective and does not kill the eggs. Follow the instructions on the bottle carefully. The hair does not have to be cut short if the medication is properly and thoroughly applied.

Where should it be applied?

Apply to the hair of the head only.

Method

- Massage well into wet hair.
- Leave at least 10 minutes (or as directed on the medication label).
- Wash off thoroughly (avoid eye contact).
- Repeat after 7 days.

How often?

Apply once a week for 2 weeks. Two applications should be sufficient to clear the lice.

Combing

The eggs can be removed after treatment by combing with a fine-tooth metal comb while the hair is wet.

Eyelashes and eyebrows

If the nits are present, apply yellow soft paraffin in a thick layer twice a day for 8 days.

Note

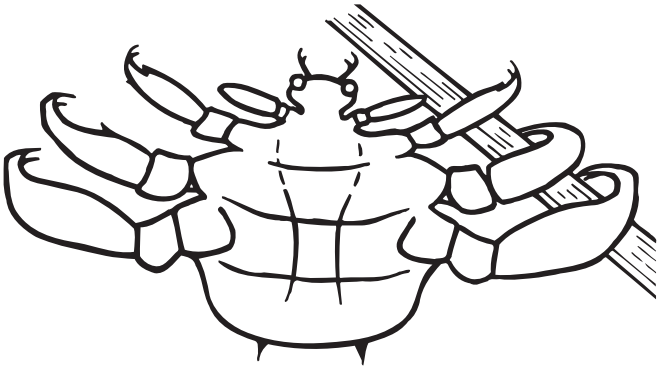
- Head lice are *not* associated with lack of cleanliness.
- Ordinary hair washing cannot prevent or cure it.
- If one member of the family has it, *all* members must be examined and treated if lice or nits can be detected.
- The source of head lice is the home, not the school.
- Wash clothing, towels and sheets after a treatment, using a normal machine wash.
- Make sure combs and brushes are free from lice by soaking them in very hot water for 10 minutes.
- A proven effective treatment is to use any ordinary brand of thick conditioner and then comb with a fine-toothed metal lice comb. Repeat every 3 days for up to 3 weeks.
- In any case wash the hair then rinse with a conditioner every 2–3 days between the 2 chemical treatments.
- Although regulations vary from state to state, exclusion from school should *not* be necessary after proper treatment.
- All antilouse preparations are toxic, but they are safe if the special head louse lotions are used according to the directions. Keep all preparations out of the eyes and out of the reach of children.

Under no circumstances should garden formulations of the malathion insecticide be used.

Lice: pubic lice

What is the cause?

Pubic lice or 'crabs' is caused by the pubic louse (or *crablouse*), *Pthirus pubis*. These insects are usually found tightly attached to the hairs of the pubic region, less commonly to the hairs of the legs, the underarms or the beard. In young children the lice can occasionally be found on the eyelashes or on the hair of the forehead. Eggs are attached to the hair shaft after being laid. The lice live for about 3 weeks.



A crablouse attached to a hair shaft (actual size is 1–2 mm)

How is it spread?

Crablice are transmitted by close personal contact, especially during sexual intercourse. They may rarely be transmitted to young children by contact with heavily infested parents.

What are the symptoms?

There may be no symptoms, but the infestation or itching may be the main complaint. The pubic area may have a musty smell.

How is it diagnosed?

Diagnosis is made by finding eggs or lice tightly applied to the hair shaft. The lice may be seen to move like crabs, but usually are seen as rust-coloured specks in the pubic hair.

What is the treatment?

Topical medication

The treatment of choice is permethrin 1% lotion or pyrethrins 0.165% with piperonyl butoxide 2% in a foam base. Lindane 1% lotion and maldison 0.5% lotion are also effective.

Where should it be applied?

Apply to the affected hair only. This is usually confined to the pubic hair. Leave for 10 minutes then brush off, or for 12 hours, according to instructions on the package.

Where the lice or their eggs are attached to eyelashes, insecticides should not be used; cure can be achieved by the liberal application of Vaseline to the lashes (twice daily for 8 days).

Note: shaving the pubic hair may help but it is not essential.

How often?

Repeat the treatment in 1 week. Sometimes a third treatment is necessary.

Clothing and bedding

Bedclothes and underwear should be washed normally in hot water after treatment and hung in the sun to dry.

Contacts

Sexual contacts and the family must be treated. Young children can be infested from heavily infested parents.

1 Marriage

Making your marriage work

When a couple marry, a bond of love is invariably present; this bond will at times be put to the test, because marriage is no 'bed of roses'. For most couples this bond will grow, mature and become a wonderful source of joy despite the rough times. However, others may not cope well with the problems of living together. To split up is a terrible loss in every respect, especially for any children of the marriage.

Many troubled couples have achieved great happiness by following some basic rules of sharing.

> The two big secrets of marital success
> are
> *caring* and *responsibility*.

Some common causes of marital trouble

- selfishness
- financial problems/ meanness
- sickness (e.g. depression)
- 'playing games' with each other
- poor communication
- unrealistic expectations
- not listening to each other
- drug or alcohol excess
- jealousy, especially in men
- fault-finding
- driving ambition
- immaturity

Some important facts

- Research has shown that we tend to choose partners who are similar to our parents and that we may take our childish and selfish attitudes into our marriage.
- The trouble spots listed above reflect this childishness; we often expect our partners to change and meet our needs.
- If we take proper care and responsibility, we can keep these problems to a minimum.
- Physical passion is not enough to hold a marriage together—'when it burns out, only ashes will be left'.
- While a good sexual relationship is great, most experts agree that what goes on *out* of bed counts for more.
- When we do something wrong, it is most important that we feel forgiven by our partner.

Positive guidelines for success

1. *Know yourself*. The better you know yourself, the better you will know your mate. Learn about sex and reproduction.
2. *Share interests and goals*. Do not become too independent of each other. Develop mutual friends, interests and hobbies. Tell your partner 'I love you' regularly at the right moments.
3. *Continue courtship after marriage*. Spouses should continue to court and desire each other. Going out regularly for romantic evenings and giving unexpected gifts (such as flowers) are ways to help this love relationship. Engage in some high-energy fun activities such as massaging and dancing.
4. *Make love, not war*. A good sexual relationship can take years to develop, so work at making it better. Explore the techniques of lovemaking without feeling shy or inhibited. This can be helped by books such as *The Joy of Sex* and videos on lovemaking. Good grooming and a clean body are important.
5. *Cherish your mate*. Be proud of each other, not competitive or ambitious at the other's expense. Talk kindly about your spouse to others—do not put him or her down.
6. *Prepare yourself for parenthood*. Plan your family wisely and learn about child bearing and rearing. Learn about family planning methods and avoid the anxieties of an unplanned pregnancy. The best environment for a child is a happy marriage.
7. *Seek proper help when necessary*. If difficulties arise and are causing problems, seek help. Your general practitioner will be able to help. Stress-related problems and depression in particular can be lethal in a marriage—they must be 'nipped in the bud'.
8. *Do unto your mate as you would have your mate do unto you*. This gets back to the unconscious childhood needs. Be aware of each other's feelings and be sensitive to each other's needs. Any marriage based on this rule has an excellent chance of success.

The Be Attitudes (virtues to help achieve success)

BE honest.	BE loyal.
BE loving.	BE desiring.
BE patient.	BE fun to live with.
BE forgiving.	BE one.
BE generous.	BE caring.

Making lists—a practical task

Make lists for each other to compare and discuss.

- List qualities (desirable and undesirable) of your parents.
- List qualities of each other.
- List examples of behaviour each would like the other to change.
- List things you would like the other to do for you.

Put aside special quiet times each week to share these things.

Male pattern baldness

What do we mean by baldness?

Baldness is slow painless hair loss that follows a distinctive pattern with increasing age. In most instances it is a natural process and in men it tends to run in the family. It is called *androgenetic alopecia*. Normally about 100 hairs on the scalp are shed every day and the hair is replaced about every 4 years. Approximately 60% of men have significant hair loss by 50 years of age.

What is the pattern?

The normal pattern is for the front hairline to recede first in the temple and frontal areas while the hair thins over the crown (back top of head). This situation may remain for the rest of a man's life but in many these frontal and top areas eventually meet and continue while the whole scalp is affected. Some people experience short periods of considerable hair loss followed by a stable period of no loss. The earlier the hair loss begins, the greater the loss in the long run.

What is the cause?

Baldness is invariably a normal process that may follow a family tendency, indicating that genetic factors are important. Ageing is also a factor and hair thinning is inevitable in most people with advancing years. Hormones play an important part—men who are castrated when young don't go bald.

Rarely baldness is caused by a severe sudden illness in which hairs stop growing and then fall out in about 3 months. However, they will usually grow back. Certain illnesses such as thyroid disorders and iron-deficiency anaemia can cause diffuse hair loss. Some fungal scalp infections can result in bald patches.

Certain treatments, notably cytotoxic drugs (used to slow down cell growth in cancer), can cause loss of hair. It usually regrows when the drugs are stopped.

Some people are affected by a specific hair loss disorder called *alopecia*, which causes premature hair loss. It may occur as round bald patches (*alopecia areata*) but may spread to involve the whole scalp (*alopecia totalis*).

How common is baldness?

It is very common and each year 1 person in 300 consults a doctor about baldness, especially if it is unusual. Many others accept it and don't seek professional help.

What can be done?

Baldness is basically an incurable condition. Although it can be embarrassing and upsetting at first, most men are able to accept natural balding as part of the ageing process. Doctors generally encourage people to accept it. Cutting the hair very short does help and looks better than patches of straggly long hair.

If not acceptable, some options include wearing a toupee, a wig or other hair substitute or having a hair transplant operation. However, with hair transplantation the new hair is often just as likely to disappear as the original hair.

What about medications?

Medicated shampoos and ointments should not be used—they do not help. Do not get caught up with quick remedies. Neither vigorous brushing nor washing of the hair usually helps.

There are two drug treatments that can help, namely minoxidil lotion or gel which is applied directly to the scalp, and finasteride taken as tablets. However, it must be emphasised that these treatments are expensive, have variable results (good to no difference) and need to be taken for the rest of one's life if a response occurs. Hair loss usually resumes when treatment is stopped.

You can discuss the use of medications with your doctor.

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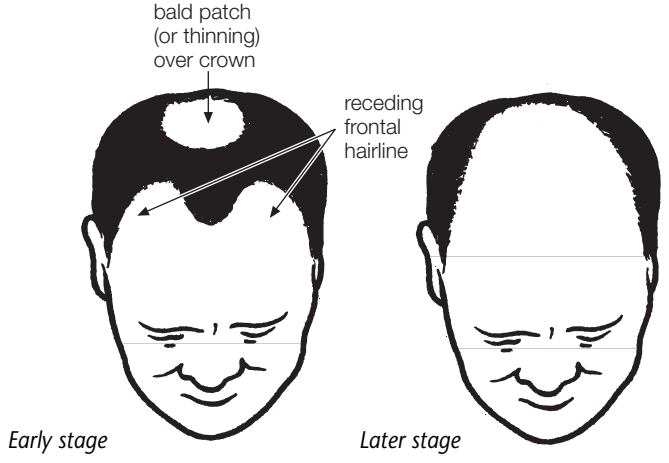


Mastitis with breastfeeding

What is mastitis?

Mastitis is an area of inflammation of breast tissue, in particular the milk ducts and glands of the nursing mother. It is caused by a cracked nipple or blockage of the ducts due to a problem with drainage of the milk. Germs from the outside get into and grow in the stagnant milk.

What are the symptoms?

You may feel a lump and then a sore breast at first. Then follows a red, tender area (see diagram) with fever, tiredness, weakness and muscle aches and pains (like having influenza).

What are the risks?

If treated early and properly, mastitis starts to improve within 48 hours. Doctors regard it as a serious and rather urgent problem, because a breast abscess can quickly develop without treatment and the abscess may require surgical drainage. Apart from the bacterial infection, infection with Candida (thrush) may occur, especially after the use of antibiotics. Candida infection usually causes severe breast pain—a feeling like a hot knife or hot shooting pains, especially during and after feeding.

What is the treatment?

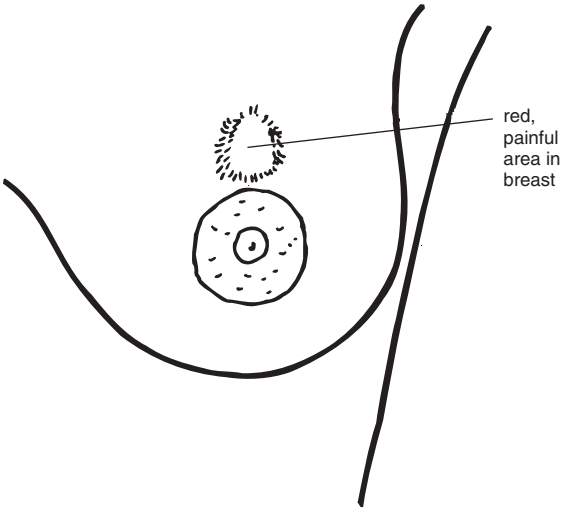
- Antibiotics: your doctor will prescribe a course of antibiotics, usually for 10 days. If you are allergic to penicillin, tell your doctor.
- Pain-killers: take aspirin or paracetamol when necessary for pain and fever.
- Keep the affected breast well drained.
- Keep breastfeeding: do this frequently and start with the sore side.
- Make sure the baby is latched on properly and change feeding positions to drain the milk.
- Heat the sore area of the breast before feeding: have a hot shower or use a hot face washer or hot-water bottle.
- Cool the breast after feeding: use a cold face washer from the freezer.
- Apply cool washed cabbage leaves over the affected side between feeds (optional).
- Massage any breast lump gently towards the nipple while feeding.
- Empty the breast well: hand express if necessary.
- Get sufficient rest: rest when you feel the need to do so and get help in the home.
- Keep to a nutritious diet and drink plenty of fluids.

How can it be prevented?

Breast engorgement and cracked nipples must be attended to. It is important to make sure your milk drains well. Faulty drainage can be caused by an oversupply of milk, missed feeds, the breast not being fully emptied (e.g. from rushed feeding, poor attachment or wrong feeding positions), exhaustion, poor nutrition and too much pressure on the breast (e.g. bra too tight and sleeping face downwards).

Keep the breasts draining by expression or by waking the baby for a feed if he or she sleeps for long periods. For an oversupply, try feeding from one breast only at each feed. Avoiding caffeine and smoking may also help.

Note: It is quite safe to continue breastfeeding with the affected breast unless your doctor advises otherwise.



Measles

What is measles?

Measles is a highly contagious disease caused by a virus; it can have more serious after-effects than many people realise. The complications can be dangerous, and so the illness should be taken seriously.

What are the symptoms?

For the first three days the patient is miserable with symptoms like a heavy cold—fever, runny nose, red and watering eyes and a dry, hacking cough. By the third day tiny white spots like grains of salt (called *Koplik's spots*) appear inside the mouth. On the fourth and fifth days a blotchy red rash appears. The rash starts behind the ears and on that day spreads to the face, the next day to the body and later to the limbs. By the sixth day the rash is fading, and after a week all the symptoms have disappeared. However, the rash can leave a pinkish red stain.

If a cough and red eyes are not present, the patient is unlikely to have measles.

How is it spread?

The disease is very infectious and is spread to other people usually by kissing, coughing and sneezing. Once inside the body the virus has an incubation period of about 10–14 days, and the patient is infectious for about 5 days before and 5 days after the rash appears.

What are the risks?

Most patients make a good recovery with lifelong immunity from further attacks, but some get complications from bacterial infections affecting the ear or chest.

There is a small but important risk of getting encephalitis (inflammation of the brain), which can lead to permanent brain damage. For this reason, immunisation of all the population is an important aim of health authorities.

What is the treatment?

The patient should rest quietly, avoid bright lights and stay in bed until the fever has settled. Any high fever should be treated with tepid sponging and paracetamol.

The nasty cough can be controlled with a cough linctus. However, there is no specific treatment and no special drug for measles. Antibiotics are not effective against viral infections, but are used if complications such as ear infections and pneumonia develop.

School exclusion

Children should be kept away from school until they have recovered or for at least 5 days from the appearance of the rash.

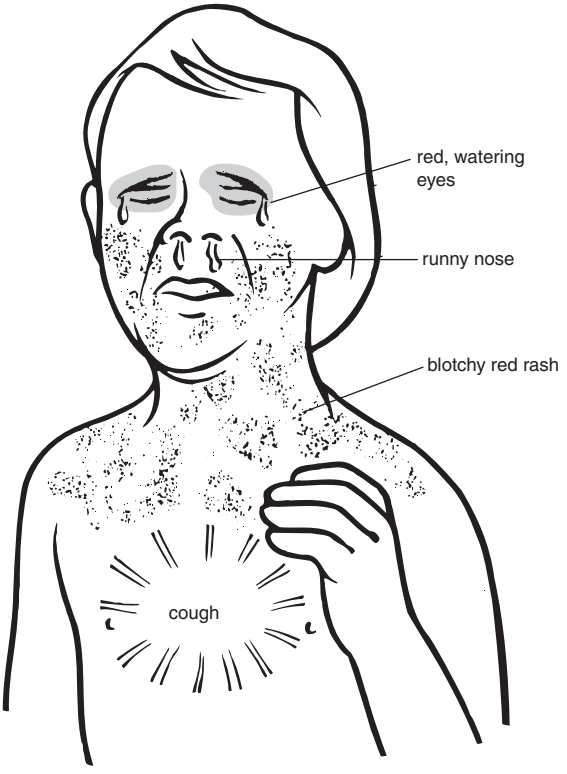
What should you do?

- Notify your doctor if any unusual problems develop, including severe constant headache, a stiff neck, convulsions, breathing problems, unusual drowsiness or earache.
- Notify school authorities.

How can measles be prevented?

A vaccine against measles is available and recommended to be given to children at 12 months and once more prior to school entry at 4–5 years. It is combined with the mumps and rubella vaccines.

> All children should be vaccinated against measles. The vaccine is free.



Typical symptoms of measles

Melanoma

What is it?

A *melanoma* is the most dangerous type of skin cancer. It grows from special cells in the skin called *melanocytes*. A melanoma is usually brown or blackish in colour and looks like a freckle, mole or spot. They can begin in moles, but most begin in normal skin.

Who gets melanoma?

About 1 in 60 people will get melanoma. It is seen most often in people aged 30–50 years, but it can occur in younger people. People at increased risk are those with:

- several dark moles
- freckles
- fair white skin
- skin that reacts to sunlight (burns easily and does not tan)

Why do they occur?

We do not know why all of them begin, but they are much more likely to occur in people who have a lot of exposure to the sun. Queenslanders have one of the highest rates of melanoma in the world. In spite of this, melanomas do not only occur in areas exposed to the sun—they can occur all over the body.

How do I know if I have a melanoma?

Only a few moles go on to become melanomas. Any changes that occur in a mole should raise suspicion. Changes may include:

- any change in the colour of the mole
- an increase in size, or spread to surrounding skin
- thickening of the mole
- bleeding
- itching

In fact, any change in a mole may be a warning, and should be discussed with your doctor.

What can be done?

Once suspicion is raised about a mole, it should be removed by your doctor. It will then be sent away to be looked at under a microscope, to check if it is a melanoma. Further treatment depends on the result of this test.

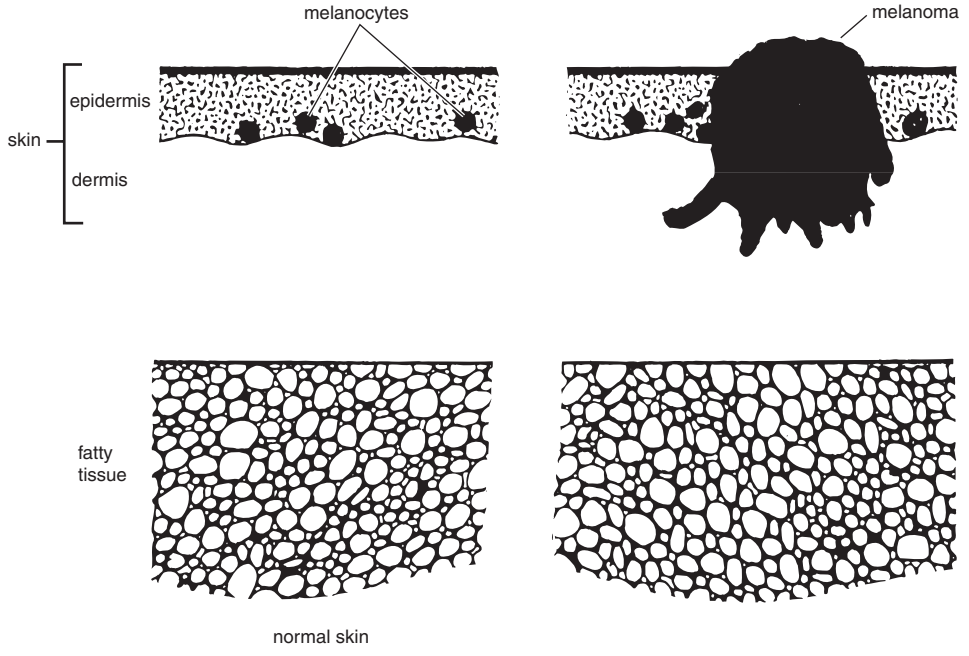
Can it be cured?

If melanomas are removed early, they can be completely cured. Over 95% of patients are cured with early removal.

Prevention is the best cure!

To decrease your chances of getting a melanoma, you should protect yourself from the sun. These rules should be followed:

- Try to avoid direct sunlight when the sun is strongest (from 10 am to 2 pm standard time, i.e. from 11 am to 3 pm daylight-saving time).
- Always wear a broad-brimmed hat and T-shirt or preferably long sleeves in the sun.
- Use a SPF factor 15 or more sunscreen on exposed skin and renew it regularly.
- Sunbaking might give you a good tan, but it is also going to increase your chances of getting a melanoma, and so you should avoid it.



Ménière's syndrome

What is Ménière's syndrome?

It is a disorder of the balance system in the ear causing attacks of severe dizziness and other unpleasant symptoms. It was described by a French physician, Prosper Ménière, in the nineteenth century.

What are the symptoms of the attacks?

- vertigo (dizziness), lasting for minutes or hours
- tinnitus (ringing or buzzing in the ear)
- a fullness or pressure in the ear
- nausea and vomiting
- loss of balance
- sweating and pallor

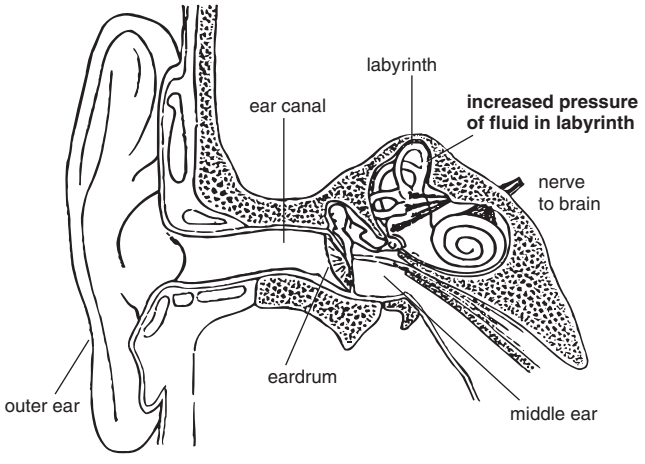
In most cases only one ear is affected.

Attacks come on suddenly and may even cause the person to fall over. The attacks usually last from 30 minutes to several hours. They may come on as often as twice a week (unusual) or twice a month to as few as one every year or so.

What is the cause?

The cause is an increase in the amount (and therefore pressure) of fluid in the labyrinth of the ear. The cause of this is unknown but certain risk factors are:

- tension or stress
- high-salt diet
- noise
- head injury
- aspirin in high doses
- allergies (e.g. to alcohol, chocolate, dairy products)
- otosclerosis (a bone-conduction deafness)



The cause of an attack

Who is usually affected?

It is equally common in both sexes and usually affects adults between the ages of 30 and 60. It is uncommon, affecting only 1 person per 1000.

What are the risks?

It is not a life-threatening problem. Many cases are mild, but in the few cases that have many attacks complete deafness and persistent tinnitus can develop over time. In these people it can be frustrating to treat and can cause them embarrassment, loss of confidence, tension and anxiety, especially as the attacks come without warning.

How is Ménière managed?

You will need to have special diagnostic tests, mainly to check your hearing and the condition of the labyrinth.

During the attack:

- Rest quietly.
- Avoid sudden changes in position.
- Do not read.
- Avoid glaring lights.
- Do not walk without assistance if unbalanced.
- Do not climb ladders, drive or work around dangerous situations.
- Take medicines as ordered; however, you may require an injection.

Preventive measures include:

- Avoid caffeine, smoking and alcohol.
- Have a low-fat, low-salt diet.
- Seek out stress management/meditation classes.

You may be prescribed diuretics (fluid tablets) or special tranquillisers. Rarely surgery can be used for severe cases.

Seek out a support group, such as Ménière's Australia Inc., Moonah, Tasmania.

Menopause

What is the menopause?

The *menopause* is the end of menstruation, which in most women occurs between the ages of 45 and 55, with an average age in Australia of 51 years. However, the term is used in a broader sense to describe the months or years before and after the last period, during which the periods become irregular and the body adjusts to reduced levels of female hormones. This may last 2–5 years or sometimes longer.

What causes the menopause?

The female hormones, *oestrogen* and *progestogen*, are no longer produced by the ovary because of a decline and finally a complete absence of maturing eggs (ova).

What are the symptoms?

Due to small amounts of oestrogen being produced in the adrenal glands, symptoms (other than the cessation of periods) may be mild or absent.

Period changes

Periods may stop abruptly or after a prolonged irregular pattern such as lighter periods occurring further apart or heavier frequent periods. Fertility is greatly reduced, far more unpredictable and finally absent.

Hot flushes

These symptoms are a sensation of heat, usually in the face and neck, but can be experienced from head to toe and last from seconds to minutes. They may be accompanied by sweating, palpitations, headache, faintness and disturbed sleep, and can be aggravated by alcohol, hot foods and drinks, and stress.

In themselves they are harmless, but they can cause embarrassment, tiredness and anxiety. They may continue from a few months to many years after the periods cease.

Vagina and bladder symptoms

The normally moist tissue of the vagina and base of the bladder can become dry and inelastic. This can result in uncomfortable intercourse and an increased chance of infection of the bladder or vagina.

Emotional problems

A woman may experience fluctuating levels of energy and concentration with tiredness, irritability, lack of confidence and loss of interest in sexual activity. Occasionally anxiety and depression can be a problem.

Is osteoporosis (thinning of bone) a problem?

It has been shown that reduced levels of oestrogen cause increased loss of calcium from bone tissue, which causes osteoporosis of varying degrees. Certain drugs and medical conditions and smoking can aggravate it. If you are slightly built or have a family history of osteoporosis, speak to your doctor about this potential problem.

What should be done?

While it is important to accept that the menopause is a natural fact of life and nothing to be embarrassed or worried about, you should discuss any unpleasant problems with an understanding friend or your doctor.

It is important to lead a healthy life: follow a correct diet, avoid obesity, get adequate relaxation and exercise, and reduce the use of cigarettes, caffeine and alcohol.

It is normal and healthy to continue sexual relations, but a vaginal lubricant such as KY jelly may be necessary if your vagina is too dry. Contraception is advisable for 12 months after the last period.

What about hormone replacement therapy (HRT)?

If you have troublesome symptoms, hormones (both oestrogen and progestogen) can be given. Usually special skin patches or tablets are prescribed.

A vaginal cream or tablet containing oestrogen is available for a dry vagina.

However, there are concerns about long-term use of HRT especially in women with previous breast cancer and those with a strong family history of it. HRT can still be used in the short term for 1–2 years to relieve the unpleasant symptoms of hot flushes.

Are there alternatives to HRT?

There are natural preparations such as those containing black cohosh extract (especially) and chaste tree extract (*vitex angus castus*) which have been shown to help. But be cautious of over-the-counter remedies as many are ineffective. Ask your doctor about alternatives.

Remember

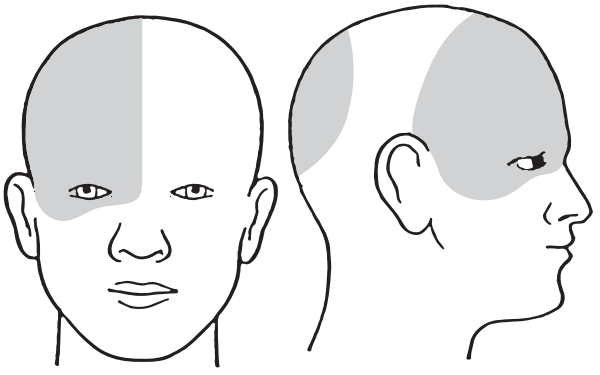
- Menopause is a normal change representing the end of reproductive life. Be informed and unafraid.
- Report to your doctor if you have a return of unusual bleeding.
- Continuing medical checks for breast examination, Pap smears and general health assessment are important.

Migraine

What is migraine?

Migraine or the 'sick headache' is derived from the Greek word meaning 'pain involving half of the head'. It is a common problem that affects about 1 person in 10. It is commoner in females and is worse between the ages of 20 and 50 years. It tends to run in families.

Famous people with migraine include Julius Caesar, Elvis Presley, Charles Darwin, Karl Marx and Tchaikovsky.



Typical site of pain in migraine (right side)

What are the symptoms?

Migraine can take several different forms, but the headache is usually preceded by altered vision followed by nausea and vomiting. This is called *classic migraine*. Another type is *common migraine*, which does not have the so-called 'aura' of altered vision but has headache with nausea and vomiting. Children may have recurrent abdominal pain rather than a headache, and can suffer an attack even as early as 6 months of age. The length of each attack is variable, but an attack usually lasts for several hours.

What is the cause?

Migraine is caused by dilation or swelling of blood vessels inside and outside the scalp in people who have very sensitive blood vessels. This results in more blood pumping through the vessels, causing a throbbing sensation like blood to an infected sore on a finger. Hence it is also called *vascular headache*.

Trigger factors

- tension and stress
- emotion and excitement
- unpleasant smells
- certain foods, such as cheese, oranges, tomatoes, chocolates and wines, especially red wine
- food additives such as monosodium glutamate ('Asian food headache') and sodium nitrite ('hot dog headache')
- fatigue and lack of sleep
- hunger
- constant physical stress
- hormonal changes: just before menses or when taking the pill
- bright lights, glare and flickering lights (e.g. television)
- changes in the weather
- excessive noise
- strong perfume
- head trauma (e.g. jarring can cause 'footballer's migraine')

What is the treatment?

There is no cure, but your problem can be considerably improved. Try to think deeply after each attack about what may have caused it—what you were doing, feeling, eating or drinking beforehand.

Some people find their attacks are related to neck problems. If you have such a problem, have your doctor attend to it. Cervical mobilisation or manipulation may help.

Prevention

- *Adopt* a healthy lifestyle.
- *Avoid* tension, fatigue and constant physical and mental stress.
- *Avoid* red wine; otherwise, restrict only those items in your diet that you suspect trigger the problem.
- *Relaxation techniques*, including meditation, may help prevent the attack. It is worth entering a meditation program.
- *Medication* may be necessary to prevent attacks and will be prescribed by your doctor.

Actual attack

You may be able to fend off the attack or modify it by taking 2 or 3 soluble aspirin or paracetamol tablets and an antiemetic (has to be prescribed), lying in a quiet, darkened, cool room and trying to relax, maybe meditating or listening to your favourite, soft, relaxing music.

Take any other antimigraine medication (as prescribed) as soon as you suspect an attack is going to occur. The earlier you start treatment the better.

Some of the newer drugs may work nicely for you. Check this with your doctor.

Some people find quick relief from simply 'sleeping off' an attack. Doctors usually prescribe mild sleeping tablets for these people.

Other helpful points

- Place cold packs on your forehead or neck.
- Avoid drinking coffee, tea or orange juice.
- Avoid moving around too much.
- Do not read or watch television.

When to seek immediate help

- unusually severe headache
- weakness on one side of the body
- loss of vision
- speech disorder

Miscarriage

After your miscarriage you will undoubtedly be confused and wondering why this sad event happened to you. The main thing is to remember that it was nothing that you did wrong, and so you should not feel any sense of blame or guilt.

What is a miscarriage?

A miscarriage, which is called a *spontaneous abortion* in medical terms, is the spontaneous ending of pregnancy before the baby (foetus) can survive outside the womb. Sometimes it is *complete* (when both foetus and afterbirth are expelled); other times it is *incomplete* (when only part of the pregnancy is expelled).

What are the surprising facts?

- About 1 in 4 pregnancies are 'lost'.
- Many are lost soon after conception; in such a case the woman may not be aware of anything except a small alteration in her period.
- Most are lost in the first 14 weeks and are obvious to the mother.

What are the symptoms?

The first symptom is loss of blood from the vagina, which can vary from slight to a heavy flow. At this stage it is called a *threatened miscarriage*.

When the solid products are passed, you feel pain due to cramping of the uterus. It is usual for only some parts to be passed to the outside, while others (e.g. the afterbirth) stay behind. This is referred to as an *incomplete* miscarriage or abortion. However, if the miscarriage is later in the pregnancy (such as at 20 weeks), it is more usual to have a *complete* abortion.

What is the cause of miscarriage?

Most miscarriages occur without an obvious cause. However, in many there is something wrong with the developing foetus, and a miscarriage is nature's way of handling the problem.

This abnormality may be caused by a genetic disorder, or by a viral infection that has affected the foetus in the first 12 weeks. Often the mother is unaware that she has picked up a serious infection (such as rubella, influenza or cytomegalovirus), but it is harmful to the delicate growing tissues of the foetus.

In other cases, abnormalities of the uterus may not allow the fertilised egg to attach to its lining, or it may reject the developing foetus later on.

Blighted ovum

This occurs when a pregnancy sac is formed in the uterus but there is no developing baby and the sac is expelled. It is a common cause of miscarriage.

What are the risks?

There is usually no risk to the mother's health. If the miscarriage is incomplete and not attended to, infection or anaemia from blood loss could occur. If you get fever, heavy bleeding, severe pain or an offensive discharge, contact your doctor. You may feel emotionally upset or depressed with feelings of loss and grief. If so, you will require help.

Will it happen again?

You are no more likely to have a repeat miscarriage than any other pregnant woman. The odds favour your next pregnancy being successful. There is no special treatment to prevent any further miscarriages, and it is best left to natural means. However, it is advisable to keep healthy and not indulge in alcohol, smoking or the use of other drugs.

What is the treatment?

It is usual to have a surgical cleaning of your uterus, especially if the miscarriage was early in the pregnancy and bleeding continues. This is called a *dilation and curettage* (D&C).

Other aspects of treatment include:

- basic pain medication such as paracetamol
- blood tests and possible ultrasound examination
- checking for Rhesus blood grouping (a Rhesus negative person may be given immunoglobulin)
- reduced activity and rest for at least 48 hours

Pay attention to any adverse emotional reactions—make sure you talk about any unusual feelings. Talk over your feelings with your partner and family.

You will need at least a week off work.

How soon should you wait before trying again?

You can safely start trying to get pregnant again very soon. It is best to wait until you have had at least one normal period. Your next period may be heavy and abnormal. Use sanitary towels and not tampons for the next 4 weeks.

Make sure that your body is ready before having sex again. It usually takes a while to become interested in sex again, and therefore partners have to be very patient and understanding.

Molluscum contagiosum

What is molluscum contagiosum?

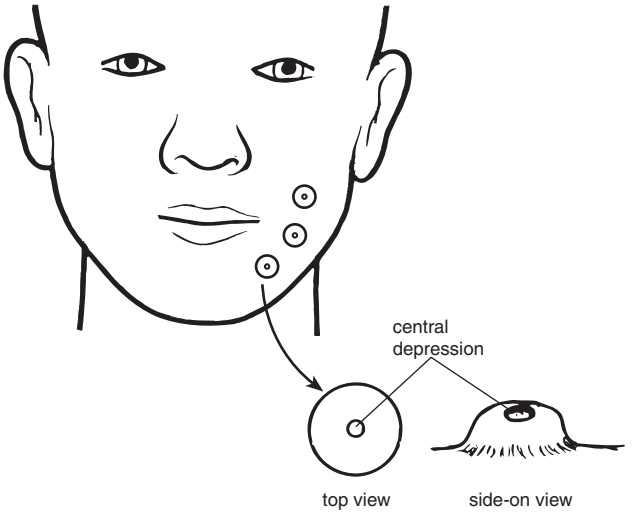
Molluscum contagiosum is a common and contagious viral infection that causes small, firm, wart-like lumps anywhere on the body. It usually occurs in school-age children. It also occurs in adults where it is commonly found on the genitals, inner thighs and abdomen and is usually sexually transmitted.

What is the cause?

Molluscum contagiosum is caused by a poxvirus. It is contagious and spreads by direct contact from person to person, although some poxviruses may be transmitted indirectly. Children usually pick up the infection from family members or other infected people with whom they swim or bathe. The incubation period can vary from 2 weeks to 26 weeks. The virus can be spread by scratching and by cortisone therapy. People with a depressed immune system, such as those with HIV infection, are prone to the infection.

What are the signs and symptoms?

The mollusca are small, firm, white or pearly lumps shaped like domes. Each lump has a central depression rather like a small pit and is about 3–5 mm in diameter. Some may grow to as large as 10 mm. They are filled with a cheese-like fluid. The lumps can be solitary or, more commonly, multiple. The lumps do not hurt or itch but can cause eye irritation if present on the eyelid.



Typical appearance of molluscum contagiosum

Where are the lumps found in children?

They can be found anywhere on the body but are more common on the face, the trunk and the flexures such as the armpits and the backs of the knees. Although they can be generalised, they tend to be confined to a particular region.

What are the complications?

The problem is not dangerous but dermatitis or a bacterial infection can develop. Scarring can occur with larger lumps. People with HIV infection can get a very profuse outcrop which is difficult to treat.

What happens to the lumps?

If untreated, just a few lumps can increase rapidly over a few weeks and can keep appearing up to 1 year later. However, all lumps will eventually disappear by themselves when the body's immune system is able to respond and destroy them. This rejection usually takes from 6 to 24 months but can take many years.

What is the treatment?

Preventing spread

Avoid scratching the lumps and keep out of communal swimming pools or spa baths.

Specific treatment

There are 101 different treatments but no magic one. It is not advisable to use painful methods such as deep pricking and lancing in children with small uncomplicated lumps (children under 10 years do not tolerate painful methods very well). There are various 'tricks of the trade' to stimulate the immune response. For large areas, apply aluminium acetate (Burow's solution, 1:30) twice a day. For smaller areas, daily dabbing of benzyl peroxide 2.5% or 10% povidone-iodine (Betadine) after gently lifting open the tip of the lump with a sterile needle inserted from the side (parallel to the skin) is worthwhile. The lump can then be covered with low-allergy paper-based tape such as Micropore. A simple but protracted method is to cover the lump or lumps with this tape only and replace it each day.

Another method is to apply liquid nitrogen to the lump and cover it with dry dressings for 2 weeks (this works better in adults). The most effective method is to extract the core with a large needle or curette, performed professionally. It is best to avoid antibiotic and cortisone ointments if the lumps are inflamed.

Mumps

Mumps

Mumps is a viral infection of the salivary glands, especially the *parotid gland*, which lies in front of and below the ear. It was one of the common infectious diseases of childhood, but is not seen as often now because of the immunisation program.

What are the symptoms?

- swollen and tender glands—one parotid gland swells first, and in 70% of cases the opposite side swells after 1 or 2 days (other glands that lie just below the jaw may also be infected)
- fever
- weakness and lethargy
- dry mouth
- discomfort upon eating or opening the mouth

How is it spread?

Mumps is spread by coughing or sneezing. The virus takes about 18 days to incubate after contact. Mumps is only a moderately infectious disease. It is infectious from 2 days before its onset up to the time the swellings disappear (usually after 6 days but can be up to 12 days).

The patient should be isolated, especially from adults who have not had mumps.

What are the risks?

Mumps usually is a mild illness, but an uncommon complication is swelling or inflammation of the testes in a male or of the ovaries in a female. It affects adolescents and adults, especially males. Swelling usually affects one side only, coming on 3–4 days after the neck swelling. The swelling, which can be very painful for a day or so, subsides after a few days. Sterility is rare, and occurs only if both testes are affected. Like any viral infectious disease, it can very rarely cause meningitis and encephalitis (inflammation of the brain).

What is the treatment?

There is no special treatment because the illness has to run its course. General measures are:

- Take paracetamol for pain or high fever.
- Rest until the fever settles.
- Follow a normal soft diet and take ample fluids. Drinking through a straw may be more comfortable.
- Apply heat to the glands (e.g. hot washers or towels) to help relieve any pain.

School exclusion

Nine days from the onset of symptoms is recommended, or up to the obvious disappearance of the swollen glands.

What should you do?

Notify your doctor:

- if a boy gets pain or swelling in the testes or a girl complains of low abdominal pains
- if the patient appears very sick (e.g. severe vomiting or headache), is delirious or has a stiff neck
- if the hearing seems affected

Notify school authorities.

How can mumps be prevented?

Mumps can be prevented by a vaccine, which in Australia is recommended to be given to children at 12 months and once more between 4 and 5 years. It is combined with the measles and rubella vaccines.

Nail disorders

What are the causes of nail disorders?

There are many disorders that can cause unsightly disfigurement of the toenails and fingernails but the most common are trauma and infection. Damage to the nail occurs from trauma (injury), and self-trauma due to people injuring their nails by excessive nail-biting, picking and over-cleaning.

Infection is a common cause especially from fungal infections which mainly involve the toenails but can affect the fingernails. An infection usually with bacteria of the skin folds surrounding the nail is also common and can become a chronic problem if the acute infection is not cured.

What is the outcome?

Damage to the nail from trauma, infection or disease can result in disfigurement, sometimes leading to permanent damage if the cause is not corrected. However, nails do heal well but take about 9 months to regrow.

What is nail lysis?

Nail lysis (*onycholysis*) refers to the loosening or separation of the hard nail plate from the underlying nail bed. 'Onycho' means nail and 'lysis' means breaking down. This lends itself to the collection of dirt and unwanted debris under the nail. It is the commonest problem affecting fingernails and is caused by avoidable trauma.

Causes of nail lysis:

- injury to the nail causing it to lift or tear
- injury from biting
- injury from habit picking
- over-obsessive cleaning and fiddling
- excessive manicuring, especially of cuticles
- resins in polishes
- nail glues causing distortion

The effect is that the nail lifts at its end allowing access of air and debris from the outside. Dirt and grit, keratin (dead skin) and chemicals get in under the nail causing discolouration and further damage to the nail.

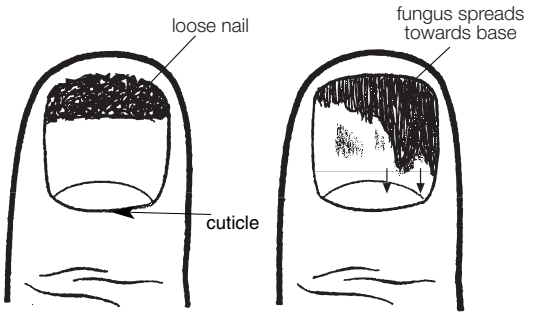
What is the cause of brittle nails?

Brittle nails are a problem of older people, especially women, caused by frequent contact with water and chemicals, particularly detergents, alkalis, kitchen cleaners and nail polish removers. Deficiency of iron and vitamins (not calcium) in the diet may also be a factor.

What is paronychia?

Paronychia is an infection of the skin folds surrounding the nail. Acute painful paronychia, which is usually caused by the bacteria *Staphylococcus aureus*, often leads to a blister of pus (often called a *whitlow*) alongside the nail.

A very serious problem is the development of chronic paronychia with the loss of the cuticle at the base of the nail. The yeast *Candida albicans* ('thrush') infection may complicate it. It often aggravates nail lysis.



Damage from injury *Fungal infection*

What is onychomycosis?

Onychomycosis is a fungal infection of the nail. It is a common problem of toenails which becomes more common as we grow older. Heat and humidity (the result of wearing shoes) are also factors. It is usually associated with tinea of the feet. If it is suspected your doctor will take scrapings of the nails for laboratory examination.

What is the treatment of nail disorders?

General fingernail hygiene

- Keep nails short.
- Keep hands dry (avoid wet work particularly immersion in dishwater).
- Wear cotton-lined gloves (for maximum 15 minutes) when washing dishes.
- Wear heavy duty cotton gloves in the garden.
- Dry the insides of gloves after use.
- Avoid unnecessary soaps and detergents, solvents and other irritants (all soaps are irritants).
- Use a mild soap and shampoo for bathing and washing.
- For nail lysis apply tape such as Micropore over the free edge for months, until healed.
- Never pick, push back or manicure cuticles.
- Never insert anything beneath the cuticle for cleaning.
- Leave hangnails alone—never pull them off.

General toenail hygiene

- Improve footwear to avoid any rubbing over the nails.
- Treat any tinea of the feet with an antifungal agent as soon as it is noticed.
- Keep the feet as clean and dry as possible including wearing well-ventilated sandals or open shoes.

Medical treatment

Your doctor will give medication according to the cause; it may be topical in the form of a cream or a lotion. Fungal infections of the nail usually require a long course of antifungal tablets for several weeks.

Nappy rash

What is nappy rash?

Nappy rash (also called *diaper dermatitis*) is a red, irritating skin rash corresponding to the area covered by the nappy. It affects the genitals, buttocks, groin and thighs, but usually spares the creases not in contact with the nappy.

Who gets nappy rash?

It is found in children up to 2 years old and has a peak incidence from 9 to 12 months. Most children will develop nappy rash at some stage of infancy with an estimated 50% having a significant problem.

What are the symptoms?

The skin is red, spotty and moist. It is irritated when urine is passed, and so causes the baby to cry.

What causes nappy rash?

It can be a common presentation of an underlying skin disorder such as seborrhoeic dermatitis, atopic dermatitis (eczema) or psoriasis. It is basically caused by excessive contact of the skin with urine or faeces. It is common—most babies have nappy rash at some time, but the skin of some babies is more *sensitive* than others. The appearance of nappy rash does not mean that the carer/s have been neglectful.

The main cause is *dampness* due to urine and faeces, especially from a chemical formed from the urine in the nappy. *Candida albicans* (thrush), which is a yeast (fungal) infection, almost always grows on the damp skin and needs to be treated.

Other causes or aggravating factors are:

- infection, especially monilia (thrush)
- a tendency of the baby to eczema
- a tendency of the baby to seborrhoea
- rough-textured nappies
- detergents and other chemicals in the nappies
- plastic pants (aggravate wetness)
- excessive washing of the skin with soap
- too much powder over the nappy area
- teething appears to make it worse

What is the treatment?

1. Keep the area dry. Change wet or soiled nappies frequently and as soon as you notice them. Disposable napkins are quite suitable.
2. After changing, gently remove any urine or moisture with diluted Sorbolene cream or warm water.
3. Wash gently with warm water, pat dry (do not rub) and then apply any prescribed cream or ointment to help heal and protect the area. Lanoline or zinc cream applied lightly will do. Stoma adhesive powder is an excellent protective substance.
4. Expose the bare skin to fresh air whenever possible. Leave the nappy off several times a day, especially if the rash is severe.
5. *Do not wash in soap or bath too often*—once or twice a week is enough.
6. *Avoid powder and plastic pants*.
7. Use special soft nappy liners that help protect the sensitive skin.

How to care for nappies

1. Rinse soiled nappies immediately in cold water and rinse out any disinfectants or bleaches used *before* washing.
2. Wash the nappies in a normal hot wash in the washing machine.
3. Make sure the nappies are rinsed to remove chemicals used and *then* dried.

Medication

For persistent nappy rash, your doctor will usually prescribe a mixture of mild cortisone cream and an antifungal cream to treat the thrush. A soft skin moisturiser such as Vaseline or a mixture of zinc oxide and castor oil should be used to keep the skin lubricated.

Key points

- Keep the skin dry.
- Expose the skin to air and sunlight where possible.
- Use protective creams.
- Do not use soap or plastic covers.
- Do not bath the baby too much.
- Visit your doctor if the rash is not responding after 4 days.

Neck: painful neck

What causes neck pain?

Pain in the neck is commonly the result of an injury such as a sharp, sudden jerk of the neck as in a motor vehicle accident. Other causes include blows to the head (such as in boxing and wrestling), striking the head on an overhead object or even simple falls. People often wake up with severe neck pain and blame it on a cold draught, but it is caused by an unusual twist in the neck for a long period during sleep. The pain mainly arises from minor injury to the many small swivel joints in the neck (called *facet joints*) and less often to injury of one of the discs between the vertebrae. In older people, arthritis can develop in these joints.

What are the symptoms?

The main symptom is pain and stiffness in the neck, but the pain can travel to the head, around the eye and ear or to the shoulder and arm. Problems from the *cervical spine* (the first 7 vertebrae in the spine) can also cause 'pins and needles' in the neck or down the arm.

What is the outlook?

Neck pain, which is rarely a severe problem, can clear up very quickly and usually responds very well to physical treatment such as exercises, massage and mobilisation. However, it can be persistent or recurrent, and for that reason regular exercise of your neck is advisable.

What about cervical collars?

Collars are very helpful for a short period for acutely painful necks, but should not be worn for any longer than 7–10 days at a time and not at night. Your neck needs to be mobile and exercised naturally.

Dos and Don'ts

To avoid bouts of further neck pain, the following rules are helpful.

Don't:

- look up in a strained position for long periods (e.g. as when painting a ceiling)
- twist your head often towards the painful side (e.g. as when reversing a car)
- lift or tug with your neck bent forwards
- work, read or study with your neck bent for long periods
- become too dependent on 'collars'
- sleep on too many pillows

Do:

- keep your neck upright in a vertical position for reading, typing and so on
- keep a good posture: remember to keep the chin tucked in
- sleep on a low, firm pillow or a special conforming pillow
- sleep with your painful side on the pillow
- use heat and massage—massage your neck firmly 3 times a day using an analgesic ointment

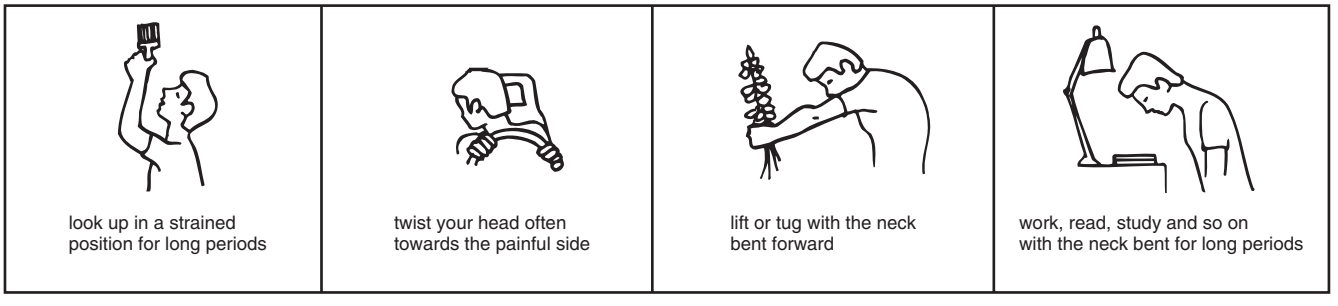
Professional help

Your doctor may prescribe mild pain-killers such as aspirin or paracetamol or other medicine for a short period, especially if arthritis is developing.

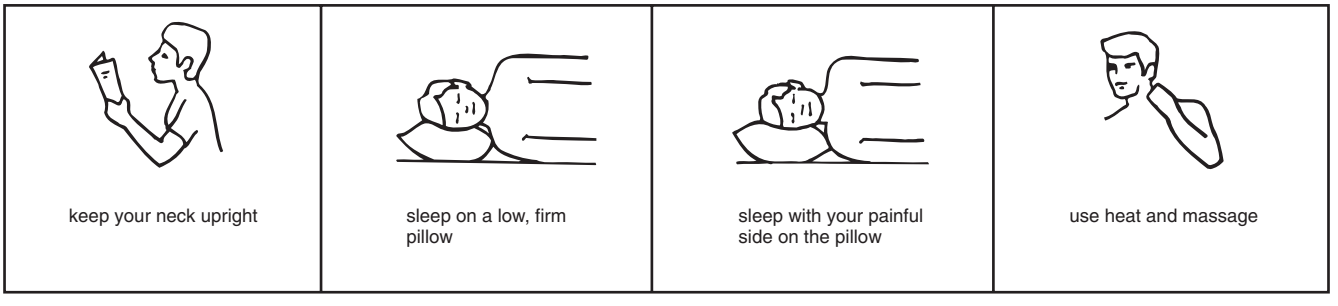
A course of exercises to mobilise stiff joints in the neck and strengthen the supporting muscles is probably the best treatment.

To overcome a painful episode, therapy to the muscles and joints by gentle mobilisation from a trained therapist is highly recommended.

Don't...



Do...



Nipple problems while breastfeeding

Sore nipples

Sore nipples are a common problem and are considered to be caused by the baby not taking the nipple into its mouth properly, often because of breast engorgement. The problem is preventable with careful attention to the position of the baby at the breast and the baby's sucking technique.

How are sore nipples managed?

It is important to be as relaxed and comfortable as possible (with your back well supported) and for your baby to suck gently, so:

- Try to use the 'chest to chest, chin on breast' feeding position.
- Vary the feeding positions. (Make sure each position is correct.)
- Start feeding from the less painful side first if one nipple is very sore.
- Express some milk first to soften and lubricate the nipple. Avoid drying agents (such as methylated spirits, soap and tincture of benzoin) and moisturising creams and ointments, which may contain unwanted chemicals and germs.
- Gently break the suction with your finger before removing the baby from the breast. (*Never* pull the baby off the nipple.)
- Apply covered ice to the nipple to relieve pain.
- Keep the nipples dry by exposing the breasts to the air and/or using a hair dryer on a low setting.
- If you are wearing a bra, try Cannon breast shields inside the bra. Do not wear a bra at night.

Cracked nipples

Cracked nipples are usually caused by the baby clamping on the end of the nipple rather than applying the jaw behind the whole nipple. Not drying the nipples thoroughly after each feed and wearing soggy breast pads are other contributing factors. Untreated sore nipples may progress to painful cracks.

What are the symptoms?

At first, the crack may be so small that you cannot see it. The crack is either on the skin of the nipple or where it joins the flat, dark part of the nipple (the *areola*). A sharp pain in your nipple with sucking probably means a crack has developed. Feeding is usually very painful, and bleeding can occur.

How are cracked nipples managed?

Cracked nipples nearly always heal when you get the baby to latch onto the breast fully and properly. It usually takes only 1–2 days to heal.

- Follow the same rules as for sore nipples.
- Do not feed from the affected breast—rest the nipple for 1–2 feeds.
- Express milk from that breast by hand.
- Feed that expressed milk to the baby.
- Start feeding gradually with short feeds.
- A sympathetic expert such as an experienced nursing mother will be a great help if you are having trouble coping.
- A pliable nipple shield may be used for a short period.
- Contact your doctor if the problem is not resolving.
- Take paracetamol just before nursing to relieve pain.

Inverted nipples

What is an inverted nipple?

It is a nipple that inverts or moves into the breast instead of pointing outwards when a baby tries to suck from it. When the areola is squeezed, the nipple retracts inwards.

What is the treatment?

During pregnancy, rolling and stretching the nipple by hand can be helpful. Your partner can assist with gentle oral and manual stimulation of your breasts and nipples.

A simple treatment, which should start at the beginning of the seventh month of pregnancy, is the Hoffman technique:

1. Draw an imaginary cross on the breast with the vertical and horizontal lines crossing at the nipple.
2. Place the thumbs or the forefingers opposite each other at the edge of the areola on the imaginary horizontal line. Press in firmly and then pull the thumbs (or fingers) back and forth to stretch the areola.
3. In the vertical position, pull the thumbs or fingers upwards and downwards.

Repeat this procedure about 5 times each morning. The nipple will become erect and is then easier to grasp, so that it can be slowly and gently drawn out.

After baby is born, try to breastfeed early while the sucking reflex is strong and your breasts are soft.

Before breastfeeding, draw the nipple out by hand or with a breast pump. Check that your baby is correctly positioned on the breast. Usually, with time, inverted nipples will be corrected by the baby's sucking.

Normal development in children

It is interesting to compare the growth and development of your child with the age at which the average child reaches a specific stage, called a milestone. The following guidelines represent an average age that these milestones are usually reached.

Interesting facts

Vision is present at birth and matures gradually to adult vision at about 12 months.

Hearing is present at birth; if not, the first 12 months are critical to correct it.

Normal development in children

Milestone	Age
Lifts chin up	4 weeks
Notices sudden constant sounds (e.g. vacuum cleaner)	4 to 5 weeks
Social smile	6 weeks
Smiles readily	2 months
Vocalises when talked to	2 months
Follows moving person with eyes	2 months
Laughs	3 months
Coos	3 months
Recognises mother	3 months
Responds to loud noise	3 months
Squeals in delight	3 months
Grasps and plays with rattle	3 to 4 months
Turns to voice	3 to 4 months
Lifts head	3 to 4 months
Rolls over (prone to supine)	4 months
Sits with support	4 to 6 months
Rolls (supine to prone)	5 months
Reaches and grasps	5 to 6 months
Transfers objects from hand to hand	5 to 8 months
Turns towards soft sound	6 months
No head lag when pulled up to sit	6 months
Feeds self biscuit/rusk	6 to 8 months
Laughs, squeals and chuckles	6 to 8 months
Sits without support	6 to 9 months
Babbles	6 to 9 months
Stands holding on	6 to 10 months
Turns instantly to voices across room	6 to 7 months
Crawls	7 to 9 months
Plays 'peek-a-boo'	8 to 9 months
Says mama/dada (inappropriate)	8 to 9 months
Anxious with strangers	8 to 9 months
Waves goodbye	8 to 12 months
Pulls up to stand	9 to 10 months
Understands 'no'	9 to 10 months
Cruises	10 to 11 months
Finger feeds	10 to 12 months
Says mama/dada (appropriate)	10 to 18 months
Walks alone or with one hand held	10 to 15 months
First word	11 to 12 months
Follows one-step command	12 to 14 months
Understands several words	12 to 15 months
Speaks single words	12 to 15 months
Points to parts of the body	14 to 24 months
Helps with dressing	14 to 24 months
Pulls off socks	15 to 20 months
Climbs stairs	15 to 20 months
Combines two words	15 to 24 months
Uses a spoon	15 to 24 months
Builds tower of 2 blocks	16 to 18 months
Points to animal pictures	20 to 24 months
Uses a fork	21 to 24 months
Scribbles spontaneously	24 to 26 months
Builds tower of 4 blocks	24 to 26 months
Kicks ball forward	24 to 26 months
Pretend play	24 to 26 months
Runs well	24 to 30 months
Buttons up	24 to 30 months
Speech all understandable	26 to 30 months
Walks up stairs: alternate feet	30 months
Names one colour	30 months
Unbuttons	30 months
Rides tricycle	2½ to 3 years
Bowel control	2 to 4 years
Bladder control	2 to 4 years
Names four colours	3½ to 4 years
Gives first and last names	4 years
Draws person with three parts	4 years
Ties shoelaces	5 years
Dresses without supervision	5 years
Strings sentences together	5 years
Fluent speech	5 years
Can skip	5 years

A good sign of healthy development is a child who is alert, is interested in objects, relates well to others and is explorative. If your child does not appear to reach these milestones at the listed age there may be no reason to be unduly concerned, as every individual is different and there is a large variation in reaching milestones. If you have any concerns speak to your doctor or infant welfare nurse.

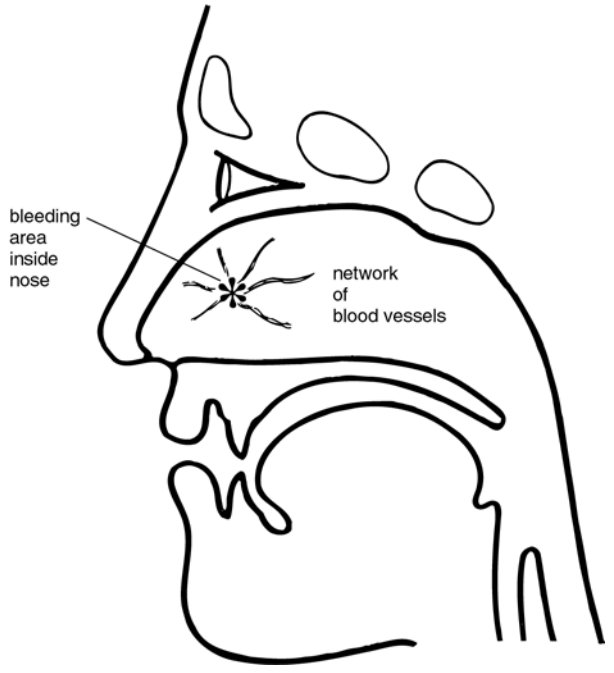
Nosebleed

What causes nosebleeds?

Nose bleeding (*epistaxis*) occurs from the tiny veins that are just under the thin surface of the middle or central part of the nose. The nasal lining has lots of blood vessels, which help to warm the air entering the nose. This tissue is rather fragile and easily damaged by infections, including colds, and by injury. A crust that usually forms over the surface is meant to help healing but comes off easily through picking the nose or sneezing. The blood vessels then bleed easily, but a blood clot forms after a few minutes to seal the bleeding vein.

What are the features of nosebleeds?

The bleeding usually occurs quite suddenly and from only one nostril. It may occur only once or twice but can occur many times over weeks. As a rule it just happens 'out of the blue' without any injury. Only a small amount of blood is usually lost before bleeding stops. Nose bleeding can affect all ages but is twice as common in children.



What are the risks?

There is rarely cause for concern as it is usually a passing problem confined to the nose only. Sometimes in the elderly bleeding can occur from the back of the nose, and this can be a major problem. Sometimes nose bleeding can be caused by a generalised bleeding disorder, but there is usually unusual bleeding elsewhere in the body.

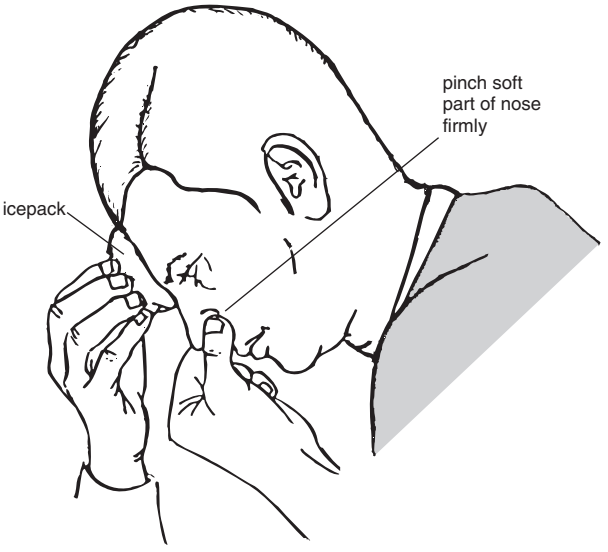
What is the treatment?

Self-help

You can stop virtually all nosebleeds yourself with a simple method.

- Sit down and bend your head forward. Hold a bowl under your nose.
- Firmly pinch the lower soft part of your nose between your thumb and finger for 5 minutes non-stop. Breathe through your mouth and do not let go for 5 minutes.

It helps to have someone apply an icepack to the bridge of your nose, but the pressure you apply with your fingers is more important (it allows a blood clot to form).



Rules

- Do not blow your nose for about 12 hours afterwards, as it may dislodge the clot.
- Avoid picking your nose.
- If bleeding stops then recurs, pinch your nose for 10 minutes.
- Try to avoid swallowing the blood.
- If bleeding continues after 20 minutes or more, report to your doctor or nearest casualty department.

Medical help

If the bleeding keeps coming back, your doctor can do many things to stop the bleeding such as:

- special gauze packing
- cauterising with a special chemical or diathermy
- applying an ointment with an antiseptic or a chemical that constricts blood vessels

Nose: stuffy, running nose

What is the cause?

Your nose is lined by a delicate tissue called *mucosa*, which produces mucus to protect your nose. If this tissue is irritated, it becomes inflamed and swells up, causing blockage and a lot of mucus.

This is most commonly caused by a viral infection. Other causes are allergies and dust. Bacterial infection may then develop, and this tends to cause yellow-greenish mucus and sometimes pain.

What are the symptoms?

The commonest symptoms are profuse mucus (running nose) and stuffiness that may cause you to breathe through the mouth.

What are the complications?

Complications are nose bleeding, ear pain and sinusitis.

What is the treatment?

Blowing the nose

Clear excess mucus by blowing into a clean handkerchief or disposable paper tissue. First clear one nostril, keeping the other closed by gently pressing on its side. Then repeat for the other nostril. A common mistake is to press both nostrils almost closed as you blow. This forces air and mucus inwards, causing ear troubles.

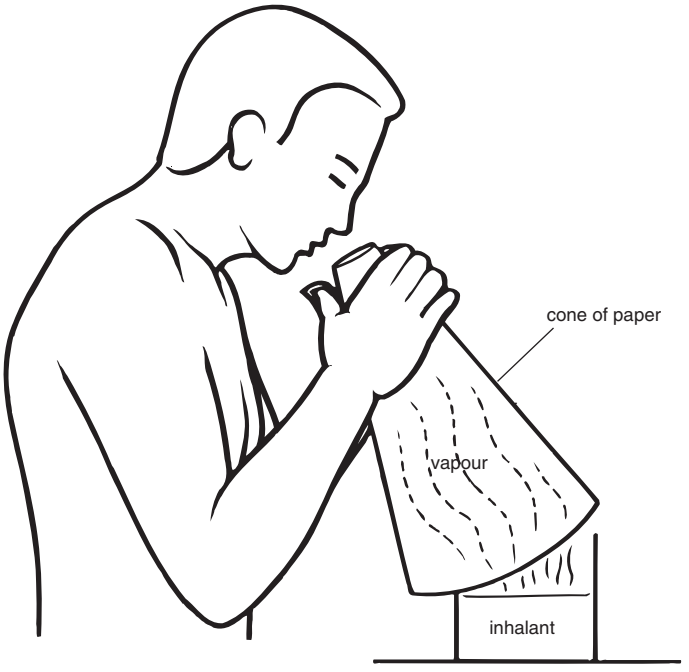
Nasal decongestants

These over-the-counter preparations may help but should be used with care. These sprays or drops are designed to shrink and dry out the swollen mucosa, but can cause a 'rebound' reaction and eventually make the problem worse. If necessary, use these for a short period of 2–3 days only, and never exceed the maximum dose advised on the packet. Simple cold-soothing 'lollies' containing menthol can be just as effective.

Steam inhalation

Steam inhalation is a simple and excellent way of clearing the nose cavities and sinuses. There are several preparations (such as friar's balsam, Vicks VapoRub or other menthol substances) that can be dissolved in hot water. Add 1 teaspoon of the inhalant to 500 mL of boiled water (just off the boil) in an old container such as a wide-mouthed bottle or plastic container. Rather than using the old-fashioned method of a towel over the head, use a paper cone or a vacuum (Thermos) flask to direct the vapour to the nose and mouth.

Inhale the vapour slowly and deeply through the nose, and then exhale slowly through the mouth. Do this for 5–10 minutes 3 times a day, including before going to bed (the most important time). When you finish the inhalation, blow your nose as described.



A good method of steam inhalation

Obesity: how to lose weight wisely

Why bother to lose weight?

Those who are overweight, whether mildly obese or unattractively fat, have much to gain. You will look and feel so much better—your self-esteem will return. It will reduce your risks of heart disease, stroke, diabetes, cancer, gall bladder trouble, hiatus hernia, high blood pressure and arthritis, especially of the hips and the knees. Taking your obesity into old age creates many uncomfortable problems.

The two keys to success

- Eat less fattening food (especially fats and alcohol).
- Burn off the calories with exercise.

If we eat more fuel (joules) than we burn, we get fat.

Fattening foods

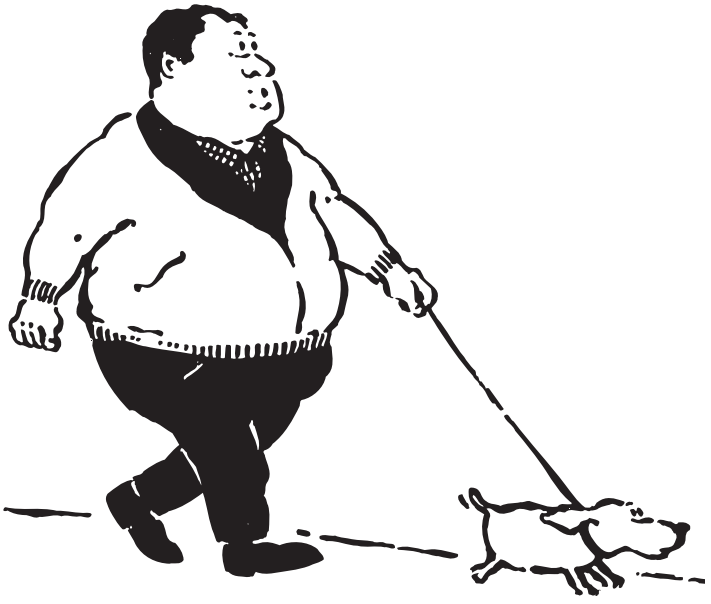
It is essential to cut down on high-calorie foods. These include:

- fats (e.g. oils, butter, margarine, peanut butter, some nuts)
- alcohol
- refined carbohydrates (e.g. sugar, cakes, soft drinks, sweets, biscuits, white bread)

A good rule is to avoid 'white food'—those containing lots of refined sugar or flour. Instead go for *complex carbohydrates*—grains and vegetables.

Physical activity

- A brisk walk for 20–30 minutes each day is the most practical exercise.
- Other activities, such as tennis, swimming, golf and cycling, are a bonus.



Losing weight wisely includes regular exercise

A plan that works!

Breakfast

- oatmeal (soaked overnight in water); after cooking, add fresh or dried fruit; serve with fat-reduced milk or yoghurt

or

- muesli (homemade or from a health-food store)—medium serve with fat-reduced milk; perhaps add extra fruit (fresh or dried)
- slice of wholemeal toast with a thin scraping of margarine, spread with Vegemite, Marmite or sugar-free marmalade
- fresh orange juice or herbal tea or black tea/coffee

Morning and afternoon tea

- piece of fruit or vegetable (e.g. carrot or celery)
- freshly squeezed juice or chilled water with fresh lemon

Midday meal

- salad sandwich with wholemeal or multigrain bread and a thin scraping of margarine (for variety use egg, salmon, chicken or cheese fillings)
- drink as for breakfast

Evening meal

- *Summer* (*cold*): lean meat cuts (grilled, hot or cold), poultry (skin removed) or fish; fresh garden salad; slices of fresh fruit
- *Winter* (*hot*): lean meat cuts (grilled), poultry (skin removed) or fish; plenty of green, red and yellow vegetables and small potatoes; fruit for sweets

Weight-losing tips

- Have sensible goals: do not 'crash' diet, but have a 3–6 month plan to achieve your ideal weight.
- Go for natural foods; avoid junk foods.
- Avoid alcohol, sugary soft drinks and high-calorie fruit juices.
- Strict dieting without exercise fails.
- If you are mildly overweight, eat one-third less than you usually do (only).
- Do not eat biscuits, cakes, buns, etc. between meals (preferably not at all).
- Use high-fibre foods to munch on.
- A small treat once a week may add variety.
- Avoid seconds and do not eat leftovers.
- Eat slowly—spin out your meal.
- Ask your doctor about medicines that claim to remove weight.

Obstructive sleep apnoea

What is obstructive sleep apnoea (OSA)?

OSA is slow or absent breathing (*apnoea*) for short periods of 10 seconds or more while sleeping. These periods of apnoea can occur many times during the night so that an observer, who is often alarmed by the problem, will notice normal breathing slow down and then stop completely. The sleeper then struggles to breathe, makes a choking or spluttering noise and resumes breathing. The cycle then repeats itself.

What are the symptoms?

The sufferer has periods of absent breathing as described above but is not aware of it. He or she wakes feeling unrefreshed, tired and in need of more sleep. Other symptoms may include irritability, morning headache, general loss of interest and sexual dysfunction.

Who gets OSA?

It is more common in middle-aged men who are overweight. Women can also get OSA but usually after menopause. People with different anatomical structures that cause narrowing of the back of the throat are at risk. This includes a large tongue, a small jaw, a blocked nose, and large tonsils and uvula.

What is the cause of OSA?

It is basically a physical problem, especially in obese patients when the soft tissue such as the floppy part of the soft palate flops against the back of the throat. This obstructs the free flow of air into the air passage. Sometimes the cause is unknown but some people with illnesses of the lungs and nervous system can get it.

What are the risks?

OSA can be life threatening. Increased daytime drowsiness leads to increased road and workplace accidents. If prolonged, it is a risk factor for heart problems and stroke.

How are people tested for OSA?

The observations of the sleeping partner are very important. However, the best test is overnight admission to a sleep disorder clinic where a computer records sleep patterns, air flow and brain activity.

What is the treatment?

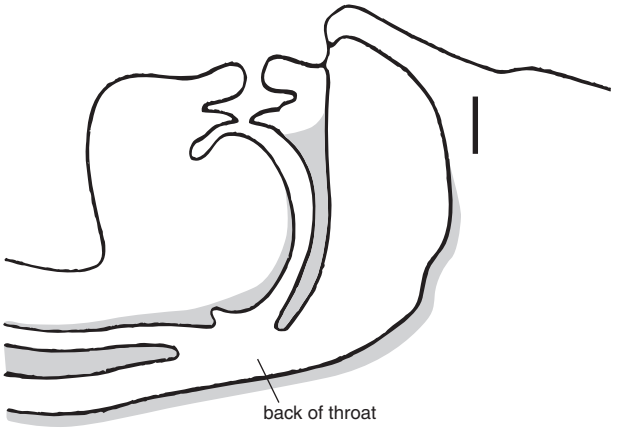
OSA is a difficult problem to treat but simple measures can help. These include:

- Lose weight if overweight—even a small amount can help.
- Get physically fit with regular exercise.
- Avoid sleeping tablets and tranquillisers.
- Avoid alcohol for up to 3 hours before going to sleep.
- Use a short course of nasal decongestants for nasal congestion.
- Avoid sleeping on your back.

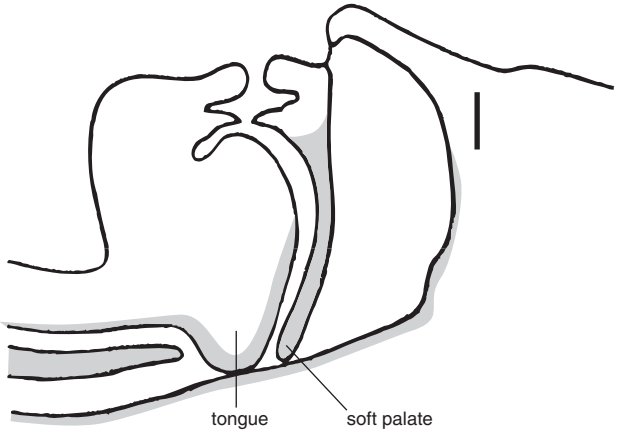
Corrective surgery for any obstruction to the airflow from the nose to the back of the throat can help those affected patients. The most effective treatment currently available for severe cases is CPAP.

What is CPAP?

CPAP, which stands for 'continuous positive airway pressure', is the most widely used treatment for OSA. The affected person wears a close-fitting mask over the nose during sleep while a small air compressor forces air under low pressure into the upper airways to keep them open.



Normal airway when sleeping



Obstructed airway when sleeping (sleep apnoea)

Osteoarthritis

What is meant by arthritis or rheumatism?

Unfortunately, these common terms produce a considerable amount of fear and concern for many people.

Rheumatism is a vague term used to describe aching in joints and muscles, and the word should be avoided.

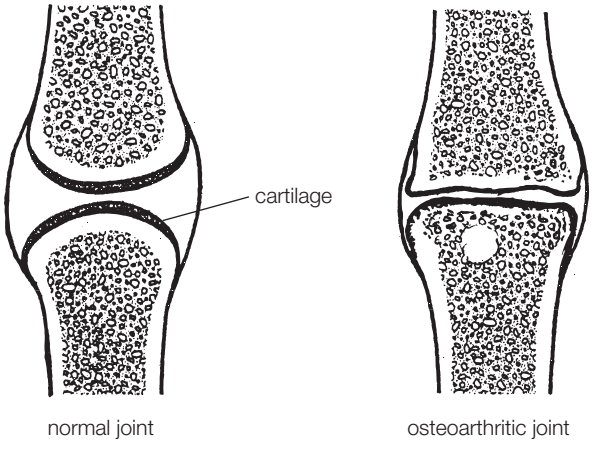
Arthritis means inflammation of the joints, but there are over 100 different types of arthritis. The most serious is *rheumatoid arthritis*, which is uncommon. The most common is *osteoarthritis*, which is usually not serious and causes only minor discomfort in some people.

What is osteoarthritis?

This is a condition that occurs during the body's normal ageing process as a result of wear and tear of the joints. It is also called *degenerative joint disease*.

The smooth gristle or cartilage that covers and protects the ends of the bones at the joints is gradually worn away. The joints become rough, and stiffness and inflammation can develop.

X-rays are taken to confirm the diagnosis of osteoarthritis; all other tests done have normal results. X-rays show some degree of osteoarthritis in 1 or more of the joints of 9 out of 10 people over the age of 40.



Osteoarthritis: the protective cartilage is worn away

How does osteoarthritis begin?

The most common reason for loss of cartilage is wear and tear due to ageing, but many people never notice it.

It commonly develops in joints that were injured earlier in life (such as with sporting injuries) or joints that have been overworked (such as those in the fingers of a knitter or the feet of a ballet dancer).

Osteoarthritis mostly affects the weight-bearing joints such as the spine, knees and hips (especially in overweight people), but the base of the thumb and the ends of the fingers are common sites also.

What are the symptoms?

The severity of symptoms varies, but usually they are pain, swelling and stiffness of the affected joints. Stiffness is usually worse in the morning. Pain is worse after excessive or prolonged activity such as walking for a long time. Movement may be difficult and interfere with normal activities.

How serious is osteoarthritis?

Osteoarthritis seldom becomes a serious problem and does not threaten one's life. It does not cause the crippling deformities of joints seen in the rarer serious forms of arthritis.

What is the treatment?

There is no cure, but there are many ways to make life more comfortable and keep you mobile and independent. Surgery can relieve a joint that is very stiff and painful.

Diet

Keep your weight down to avoid unnecessary wear on the joints. No particular diet has been proved to cause, or improve, osteoarthritis.

Exercise

Keep a good balance of adequate rest with sensible exercise (such as walking, cycling or swimming), but *stop* any exercise or activity that increases the pain.

Heat

A hot-water bottle, warm bath or electric blanket can soothe the pain and stiffness. Avoid getting too cold.

Walking aids

Shoe inserts, good footwear and a walking stick can help painful knees, hips and feet.

Medication

Aspirin and paracetamol are effective pain-killers for mild osteoarthritis. Your doctor may prescribe antiarthritic medications, but a few may have to be tried to find the one that works best for you. The tablets should be taken with food. A natural substance, glucosamine, has proven effectiveness for osteoarthritis of the knee.

Injections: New lubricants that are injected into the knee are available and suit many people.

Special equipment

It is possible to increase your independence at home. There is a wide range of inexpensive equipment and tools that can help with cooking, cleaning and other household chores. These can be discussed with people at an Independent Living Centre, with physiotherapists and occupational therapists.

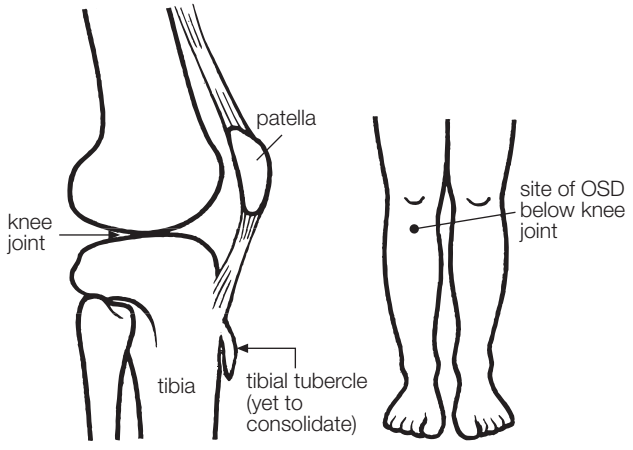
The Arthritis Foundation in each capital city is able to provide information about many aspects of arthritis.

Osgood-Schlatter disorder

What is Osgood-Schlatter disorder?

It is a short-lived problem of the leg at the knee, in which a painful lump affecting the bone develops in early adolescence during a period of a growth spurt, associated in particular with considerable physical activity. The area of bone affected is the *tibial tubercle* which is a prominence just below the knee joint. It is a growing centre for this long bone of the lower leg.

This common disorder was described independently by two surgeons in 1903, namely Robert Osgood of Boston, USA and Carl Schlatter of Zurich, Switzerland.



What are the signs and symptoms?

- a swollen, warm and tender bump below the kneecap
- pain in this area during and after activity
- pain aggravated in sports involving kicking, and running and jumping, such as basketball, football and gymnastics
- pain reproduced by attempts to straighten the bent knee against force such as jumping or weight-lifting
- pain aggravated by kneeling down and going up and down stairs
- it usually affects one knee but about 1 in 3 patients will have both knees affected

The diagnosis is usually obvious but can be confirmed by an X-ray which shows a gap in the tubercle.

Who gets Osgood-Schlatter disorder?

It is a feature of early adolescents between the ages of 10 and 18, being commonest in the 11–14 age range. It is uncommon after age 16. It affects both sexes but is 3 times more common in boys compared with girls.

What is the cause?

There is usually no history of preceding injury such as a fall or bicycle accident. It is caused by the stress of constant traction on the immature tibial tubercle by the patellar tendon from sporting activity and running or jogging. This friction effect causes inflammation.

What increases the risk for the disorder?

- over-enthusiastic action routines (e.g. running, jogging, jumping)
- being male and aged 11–16
- being overweight
- rapid bone growth

What is the usual outcome?

It is a temporary self-limiting condition that usually heals over 6–18 months with an average of 12 months. Sometimes recovery may be delayed, especially in those who continue sporting activity, until bone growth ceases. The end result is a prominent painless tubercle.

What is the best management?

The best treatment is rest from sporting activity to prevent pain and allow healing. Apart from running, other activities such as cycling and football should be restricted. Any activity that induces pain should be avoided during the healing phase. For acute pain use icepacks and basic analgesics. A cushioned kneepad is helpful if kneeling hurts. Warm compresses or heat packs can provide relief after the acute phase settles. Supervised quadriceps exercises involving stretching can promote healing. Avoid cortisone injections and immobilisation in plaster casts. Rarely a small operation is necessary to remove an irritating piece of bone that has not healed.

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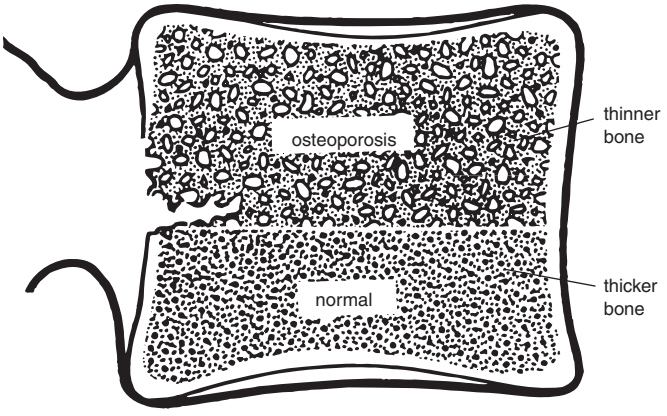
Osteoporosis

What is it?

Osteoporosis is a condition leading to thinning of bones so that they become weak and brittle.



Who gets it?

Osteoporosis is found mainly in middle-aged and elderly women, after the menopause (when the periods cease). It can also affect men.

Why do they get it?

Women at greatest risk are those who:

- are of Caucasian or Asian racial origin
- are thin and slight
- smoke cigarettes
- drink alcohol
- drink a lot of coffee
- get little exercise
- have little calcium in their diet
- have a poor diet in general
- lack hormones due to the menopause
- take cortisone tablets

The longer we live the greater the chance of getting it.

How do you know if you have it?

Most women do not know, because thinning of the bones occurs unobtrusively. It is often first noticed when a bone breaks, usually the hip, wrist or vertebrae of the spine. X-rays may give some idea but they are limited because osteoporosis is not detectable until up to 50% of bone is lost.

The best test which is done on the spine and neck of the femur bone is the DEXA bone densitometry scan.

What can you do about it?

- Take regular weight-bearing exercise such as walking (e.g. brisk walking for 30 minutes 4 times a week).
- Stop smoking.
- Cut down on alcohol and caffeine.
- Have adequate calcium in your diet: 1000–1500 mg per day (1500 mg if postmenopausal). Eat calcium-rich foods such as low-fat calcium-enriched milk (500 mL contains 1000 mg), other low-fat dairy products (e.g. yoghurt or cheese), fish (including tinned fish such as sardines and salmon, with the bone), citrus fruits, sesame and sunflower seeds, almonds, brazil nuts, hazelnuts and tofu.
- Use vitamin D—best got from sunlight on your skin (e.g. 5 minutes exposure a day).

Drug treatment

The best treatment is probably preventive hormone replacement therapy with the onset of the menopause. There are now many drugs available to treat established osteoporosis.

How can falls be prevented?

Falls tend to cause fractures in osteoporotic bones. They can be prevented by:

- removing loose or worn carpets and scatter rugs
- wearing low-heeled shoes
- holding onto railings when using stairs
- installing safety bars in the bathroom
- using night lights to provide better visibility
- being careful taking drugs, especially sleeping tablets
- having good eyesight: regular checks are advised

What can your doctor do?

Your doctor may:

- discuss your diet
- suggest hormone tablets and calcium supplements
- review your 'risks' for osteoporosis, and if you are at high risk suggest further tests such as bone density measurement
- prescribe special medication

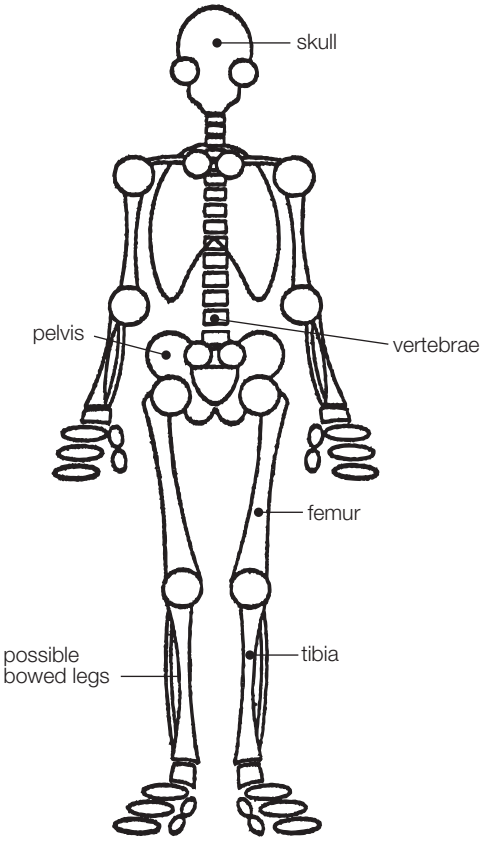
Key points

- Osteoporosis is a common condition.
- It starts from a young age but develops faster in middle and older age.
- The main aim is to *prevent* it from occurring.

Paget's disease of bone

What is Paget's disease of bone?

It is a disorder of bone in which the normal maintenance system that keeps bones healthy breaks down. There is constant turnover of bone cells but in Paget's disease new bone is produced faster than the old bone is broken down. The new bone tissue is softer and more fragile than usual because it is filled with vascular (bloody) and fibrous tissue. The affected bones become enlarged and misshapen. The cause is unknown but a viral cause is suspected.



How common is Paget's disease and who gets it?

It is quite common. In Western countries about 2 people in 100 over the age of 40 have it but this increases to at least 1 in 10 over the age of 80. However, it causes problems in only one-tenth of those affected.

Paget's disease can affect both sexes but is twice as common in men compared with women. It has a tendency to show up in certain population groups, being more prevalent among Anglo-Saxons, especially those from the north of England.

There is a definite hereditary tendency as there is an increased risk of getting Paget's disease in those with a family history of it.

Which bones are affected?

Paget's can occur in any bone and may be present in just one or in several bones. The bones most frequently affected (in approximate order) are the hip bone (pelvis), the thigh bone (femur), the shin bone (tibia), the skull, the spinal bones (vertebrae), the humerus and the collar bone (clavicle).

What are the symptoms?

Paget's disease does not always produce symptoms (only in 1 in 10–20 patients). When it does, bone pain (usually in the spine or legs) is the most common and this may be mild but is typically a deep dull ache especially at nighttime. Other symptoms include joint pain and stiffness (particularly of the hips and knees), difficulty walking, deafness and headache (if the skull is involved).

What are the signs?

The bones may become misshapen, causing problems such as bowed legs or an enlarged skull ('hats don't fit any more'). People may walk with a waddling gait. The skin over the bone may feel warm.

It is easily diagnosed by special blood tests and X-rays.

What are the risks?

The weakened bones are more likely to break and rarely a tumour can develop in the affected bone. Deafness can occur from pressure on a nerve from the enlarged skull. The increased blood flow through the bones can cause heart failure or high blood pressure.

Who should be treated?

Many people, especially the elderly who have no symptoms, need no special treatment. Relatively young patients and those with symptoms especially in the legs and spine will require treatment.

What is the treatment?

General measures:

- Keep to a healthy diet, especially with ample fruit and vegetables of all types, wholegrain breads and cereals.
- Get adequate rest during a difficult period of pain but generally keep as active as normal.
- Take simple analgesics such as paracetamol for any pain.

Medication

In the past there was no specific treatment for Paget's disease. There are now at least 3 groups of drugs but a group called biphosphonates is currently the preferred one. These have revolutionised the management and can be taken by the mouth or given by injection. Your doctor will advise about the best drug and any possible side effects. The outlook with these new drugs is very good.

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Painful breasts

What causes breast pain?

Breast pain (known as *mastalgia*) has several causes. The main type of breast pain is *cyclical mastalgia*, which is a general breast discomfort that occurs in the second half of the menstrual cycle. The pain, which comes on with ovulation, is mainly premenstrual. It obviously is caused by a hormonal effect and is not harmful.

Other causes are:

- pregnancy
- infection (after childbirth)
- tumours
- certain drugs
- weight gain
- bra problems

Note: Early breast cancer is usually painless, but all lumps need careful investigation.

Is it common?

It is a very common problem, with about 2 out of 3 women complaining of breast pain at some stage of their lives. It is most common in the 30s and early 40s.

What are the symptoms?

The pain can vary from very mild to severe. It is usually a heaviness or discomfort in the breasts, while some women experience a prickling or stabbing sensation.

The breasts may be so tender that relationships with partners and children are affected because hugging and fondling cause distress. The breasts may feel lumpy or quite normal to touch. The lumpy breast may develop cysts, which your doctor may drain.

What is the treatment?

The first thing to keep in mind is that breast pain is common, and only 1 case in 200 will have cancer as the cause. However, you must continue to practise breast self-examination and report any lumps that do not go away after your periods. You do not have to live with your breast discomfort.

Self-help

- Reduce weight if you are overweight: aim to keep at ideal weight.
- Reduce or cut out caffeine.
- Follow a nutritious, low fat, high complex carbohydrate diet.
- Wear good quality, comfortable bras.
- Take 2 aspirin or other mild analgesic for pain.
- Exercise aerobically and exercise the upper trunk.

'Natural' medication

Vitamins may help (although this is not scientifically proven):

- Vitamin B1 (thiamine): 100 mg per day
- Vitamin B6 (pyridoxine): 100 mg per day
- Evening primrose oil capsules: 4 g per day

Use one or a combination of these agents.

Most women (85%) can be treated with natural methods. Your doctor can prescribe stronger medication to relieve the problem, so report persistent pain or any persistent lumps.

Drug treatment

Adjustment of oral contraception or hormone replacement therapy (if it applies to you) may help mastalgia. However, there are several other hormones that can be prescribed.

Parkinson's disease

What is Parkinson's disease?

Also known as *shaking palsy* or *paralysis agitans*, *Parkinson's disease* is due to an imbalance of chemicals in the nerve cells in the brain that regulate movement. Because these cells do not 'fire' smoothly, various body movements are affected.

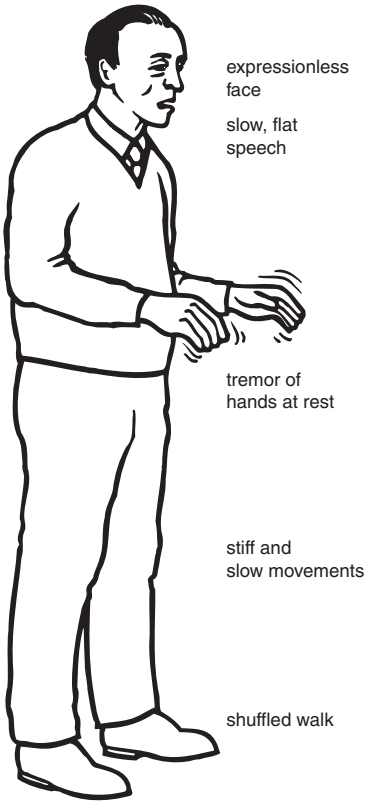
How common is the problem?

About 1 person in 1000 develops Parkinson's disease, and these are mainly elderly or in late middle age. It can be caused by some drugs and toxic fumes or substances such as carbon monoxide and lead.

What are the symptoms?

The symptoms are:

- stiff and slow movements, causing difficulty starting a movement
- a shuffled walk
- an expressionless face
- slow and flat speech
- difficulty writing
- a tremor, especially on the hands and arms, with a rubbing together of the thumb and forefinger; the tremor is worse at rest and tends to go away when an action such as picking up a pen or other object is performed



Symptoms of Parkinson's disease

There is no pain, numbness or pins and needles. Later on falls may be a problem.

What causes the symptoms?

The problem is caused by the lack of a special chemical in the brain called *dopamine*, which the nerve cells need to 'fire'. It is rather like the chemical in a battery gradually running out so that the battery becomes flat.

It is not caused by a brain tumour or a stroke, but in some cases poor circulation to that part of the brain can be responsible for the problem.

What is the outlook?

There are many different grades of severity but many people have a mild problem and are able to cope, even without the need for dopamine-producing drugs. If the disease gets worse, it is usually only a very slow process; it is rare that a person gets severely disabled and confined to a wheelchair. If you develop Parkinson's disease after the age of 60, you may expect to live out your normal life expectancy.

What are the risks?

The disease is not life-threatening because it does not affect nerves that supply the heart or other vital organs.

Two common risks are falls and mental depression.

What is the treatment?

Self-help

An important part of managing at home is to keep as active as possible with the help of a caring family, friends and other people. Your mobility can be assisted, for example, with walking sticks, bath rail supports, special banisters where you normally walk and chairs with high seats and arms.

It is important to have regular exercise and to stick to your everyday routine as actively as possible. Your doctor should see you regularly to assess your progress. Ask about special programs to teach people how to improve their balance and coordination.

Medication

No drug will cure the problem, but there are modern drugs that can do much to relieve symptoms, particularly stiffness and poor mobility. Drugs that lead to higher levels of dopamine in the brain can be prescribed and it is better to prescribe them early rather than wait until the symptoms are more severe.

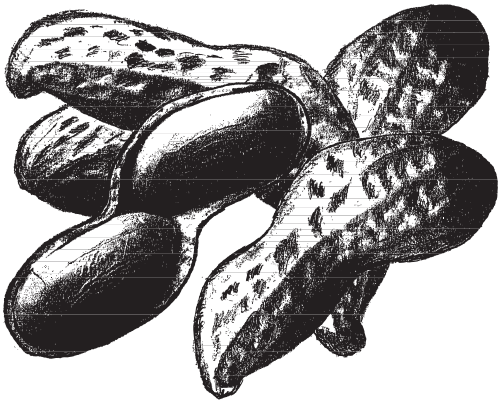
The drugs can have side effects such as feeling sick in the stomach (nausea) and a dry mouth, and so your doctor will have to juggle them according to the progress you are making.

Peanut allergy

What is a food allergy?

Allergies are oversensitive reactions by the body's immune system to certain foods, due to the release of a chemical called *histamine*.

A food allergy, which usually starts in infancy and childhood, is commonly caused by milk and other dairy products, eggs and peanuts. Other foods include oranges, soya beans, nuts, chocolate, fish and wheat.



What about peanut allergy?

Peanut allergy, which is becoming more common especially in children, can be a very serious life-threatening problem. It is a reaction to peanut protein and is seen in about 1 in 50 children. The signs usually appear in the first 3 years of life. It is a particular problem if it occurs in children with asthma or eczema.

A special feature of peanut allergy is that it usually gets worse with time, while most food allergies improve.

What are the symptoms?

Reactions to peanuts usually begin within minutes of contact.

The first symptoms are:

- itching, especially around the mouth
- burning, especially around the mouth

Others that follow may include:

- flushing, especially of the face
- skin rash
- wheezing
- swelling of the tongue and lips
- difficulty breathing
- nausea and vomiting
- diarrhoea
- collapse
- loss of consciousness

How is it diagnosed?

It is diagnosed initially upon suspicion of an abnormal reaction to food containing peanuts. A food challenge test and skin prick test, and/or RAST test under medical supervision, help confirm the diagnosis.

What are ways of being exposed to peanuts?

Exposure can come from:

- eating peanuts directly
- eating peanut products, for example:
  - peanut sauce
  - peanut butter
  - certain muesli bars
  - certain chocolates
- close contact with a person who eats the above products
- mother's diet via breastmilk
- peanut-based oils massaged into the skin

Ingested peanuts cause the most severe reactions but the allergy can be triggered by skin or eye contact with the food, or even inhalation of food particles containing peanut.

What are the effects of becoming sensitised?

Once sensitised, a child can get a serious allergic reaction to even a minute amount of peanut. There is evidence that as little as one two-thousandth of a peanut can do this.

What are the risks?

There is a risk of *anaphylaxis*, which is a potentially fatal collapse or 'shock'. The affected child will suddenly swell around the face, go pale or blue and go floppy. Urgent medical attention is needed so that life-saving adrenaline can be injected. An ambulance or your doctor should be called.

The combination of asthma and peanut allergy is quite dangerous.

Do peanuts cross-react with other nuts?

Children with peanut allergy can become allergic to other nuts such as walnuts, hazelnuts, cashews, almonds, pistachios and macadamia nuts.

What is the management?

It is vital to avoid eating or coming into contact with peanut-containing foods. It is also important to read all food labels on every food you buy or eat to determine if the food contains any traces of peanut. When eating away from home ask about the probability of peanut occurring in food ingredients and preparation methods. This applies particularly to food outlets or restaurants preparing Asian food. Be wary of satay sauce.

Those at special risk should have an emergency anaphylaxis kit on standby at home or when away from home.

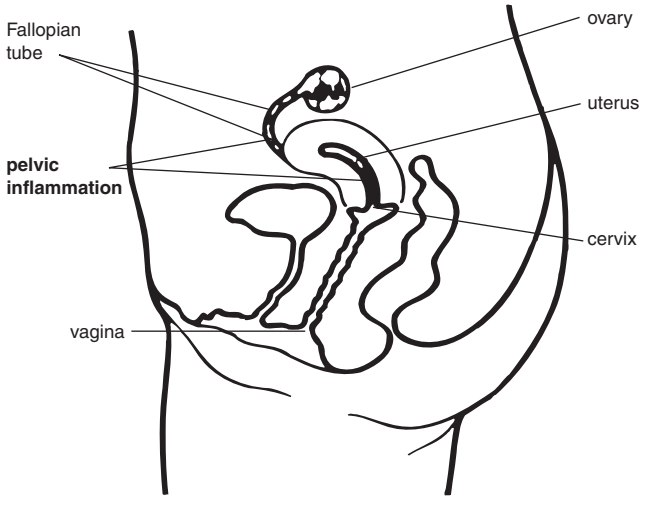
It is advisable for women who have a history of allergic (atopic) disorders to avoid eating peanut products during pregnancy and when breastfeeding.

Pelvic inflammatory disease

What is pelvic inflammatory disease (PID)?

Pelvic inflammatory disease describes any infection of the reproductive organs of a woman. It occurs when microbes (germs) travel up through the cervix and uterus (womb) and then spread inwards to the Fallopian tubes, ovaries and surrounding tissues in the pelvis. The commonest serious infection is that of the tubes—this is called *salpingitis*.

A pelvic infection can be either *acute*, which causes sudden severe symptoms, or *chronic*, which gradually produces milder symptoms.



What are the facts?

Here are some basic facts about the disease:

- Sexual intercourse causes up to 75% of cases.
- Minor operations [such as the insertion of an intrauterine device (IUD)] or procedures of pregnancy (such as a miscarriage, an abortion or even a delivery) can cause PID.
- Up to 10% of young women normally have the microbes, which include chlamydia and gonorrhoea, on their cervix. These women are at special risk of getting PID.
- The commonest cause of infertility in Australia is PID—it affects about 5000 Australian women each year.
- PID is a preventable disease and it is best diagnosed by *laparoscopy* (where a tube is passed through the abdomen).

Who are the women most at risk?

The women most at risk are those who:

- are under 25 years of age
- have abnormal Pap smears when aged between 15 and 35 years
- have multiple sexual partners
- have steady partners who have sex with others
- do not use barrier methods of contraception (e.g. condoms)
- have operations needing the opening of the cervix (e.g. dilation and curettage, and placement of an IUD)

What are the symptoms?

Some patients may feel no symptoms, but others may have symptoms that vary from mild to very severe.

Acute PID

- fever
- severe abdominal pain

Chronic PID

- ache in the lower back
- mild lower abdominal pain

Both acute and chronic

- painful intercourse
- menstrual problems (e.g. painful, heavy or irregular periods)
- unusual, perhaps smelly, vaginal discharge
- painful or frequent urination

What are the risks?

The main serious risks are subsequent sterility, ectopic pregnancies and further episodes of PID. Occasionally an acute infection may cause a pelvic abscess or cause peritonitis or even blood poisoning by spreading.

How can it be prevented?

- Safe sex is most important. Insist that a partner with a possible sexually transmitted disease (STD) uses a condom.
- Avoid IUDs if you have a history of PID or have a number of sexual partners.
- It is advisable to have antibiotic treatment if a partner has or gets an STD even if you have no symptoms.
- If you get PID, your partner or partners should be treated.
- Those at risk for PID should have regular checkups.

Note: It is your responsibility to inform your partner or partners that you have PID.

What is the treatment?

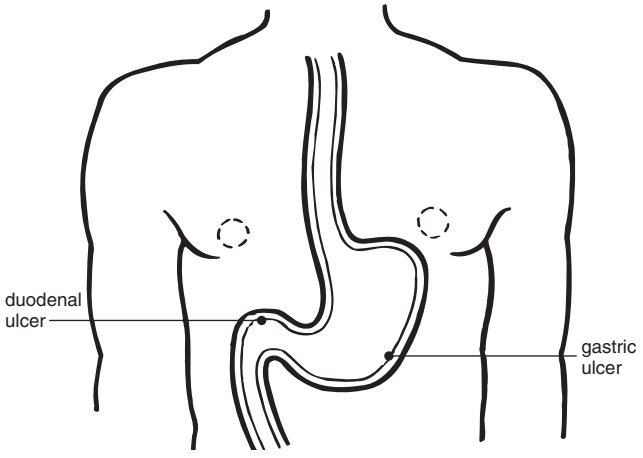
A course of antibiotics is given, usually by mouth. Avoid sexual intercourse or manipulation of your vagina (e.g. with hands or tampons) until the infection is cleared. This may take 2–4 weeks.

If you have an IUD, it should be removed.

Peptic ulcer

What is a peptic ulcer?

A *peptic ulcer* is a raw area or small hole in the lining of the stomach or the *duodenum* (the first part of the small intestine). Most ulcers occur in the duodenum (*duodenal ulcers*); a smaller number develop in the stomach (*gastric ulcers*).



What causes a peptic ulcer?

Gastric juice produced by the lining of the stomach contains acid and an enzyme (called *pepsin*) that digests protein in our food. This acidic juice can cause an erosion of the lining of the stomach or duodenum if it is excessive. This lining is normally protected by a layer of thick mucus, like a coating of slime. Once it is broken, the raw area of an ulcer can form. It is now known that bacteria in the stomach called *Helicobacter pylori* (*H. pylori*) are associated with or responsible for this breakdown.

A common modern cause is the use of drugs to treat pain and arthritis, known as *non-steroidal anti-inflammatory drugs* (NSAIDs).

Helicobacter pylori

H. pylori is a bacterium that resides on the inside lining of the stomach. It has the ability to cause inflammation of the stomach and duodenum leading to peptic ulcers and gastritis. About 40% of the population over 40 years of age are infected with it but many have no problems. If proved to be present with an ulcer it needs to be eradicated with a combination of drugs (usually two antibiotics and an ulcer-healing agent) for 7–14 days. A 80–90% eradication can be expected.

What are the symptoms?

Common symptoms are:

- upper abdominal pain (just under the ribs)
- heartburn or indigestion
- 'hunger pain' when the stomach is empty (between meals and at night)
- pain relieved by antacids and milk

Uncommon symptoms are:

- back pain (between the shoulder blades)
- bleeding—vomiting blood and blood in motions

The diagnosis is confirmed by gastroscopy (placing a tube into the stomach) and the *H. pylori* test.

Who is prone to ulcers?

Ulcers are common in:

- men
- young to middle-aged adults
- those who constantly take certain drugs (e.g. aspirin, cortisone, NSAIDs)
- heavy smokers
- heavy alcohol drinkers (possible)
- those who suffer constant stress and anxiety
- those with a family history and blood group O (associations)

What are the risks?

Most ulcers are relatively easy to cure or control. Bleeding can result in anaemia or can be sudden, and this is an emergency. Perforation or blockage of the duodenum can occur. Cancer rarely occurs with a gastric ulcer.

What is the treatment?

Self-help

- Do not smoke.
- Drink alcohol only in moderation.
- Do not swallow aspirin or antiarthritic drugs unless really necessary.
- Follow a normal healthy diet with 3 balanced meals a day.
- Do not skip meals, eat irregularly or have late-night snacks.
- Avoid any foods that make your symptoms worse.
- Continue your normal activities, but aim for a non-stressful lifestyle.
- Take antacid tablets or medicines to relieve symptoms.

Medical help

Your ulcer problem should be managed with the advice of your doctor. Antacids may not be enough, and special drugs are now available to heal ulcers. These modern drugs reduce the output of gastric juice and counteract *Helicobacter pylori* (usually with triple therapy), and need to be taken exactly as instructed. If all these things fail, an operation can be very successful.

Note

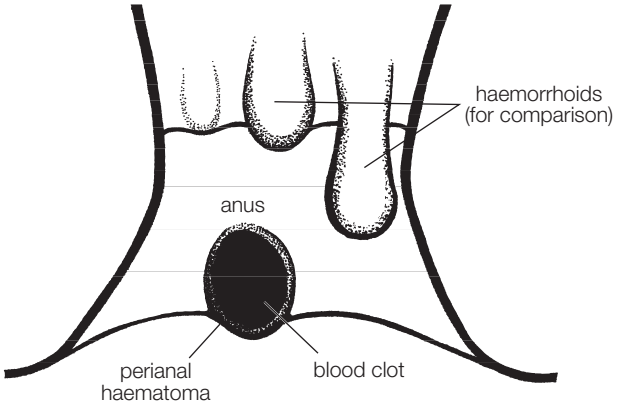
- Peptic ulcers are now very treatable with excellent modern drugs, and so any suffering should not be necessary.
- Report any sudden severe stomach pain or vomiting or passing of blood.

Perianal haematoma

What is a perianal haematoma?

Haematoma means 'a collection of blood' and *peri* means 'around' so a *perianal haematoma* is a small collection of blood that develops just outside and around the opening of the anus.

It is sometimes referred to as an *external pile*, a *thrombotic pile*, or an *external haemorrhoid*, but strictly speaking it is not a haemorrhoid, which is a collection of blood arising inside the anus.



What are the symptoms?

- pain which varies from mild to severe
- feeling of a lump at the anus
- bleeding—small flecks of blood occur sometimes

The pain, which usually comes on suddenly, seems out of proportion to such a small lump, but the area around the anus is very sensitive.

What aggravates the symptoms?

The pain is worse on sitting, walking and opening the bowels.

What does it look like?

It looks like a small purplish swelling at the anus, rather like a semi-ripe blackcurrant. It is about the size of the fingernail of the little finger and is tender to touch.

What is the cause of perianal haematoma?

The cause is a rupture of a small vein that drains blood from the anus, which has a very rich blood supply. This rupture may be brought on by straining at the toilet, coughing, sneezing or lifting a heavy object.

At first there is a very small collection of blood under the skin, but after a couple of hours it forms into a small firm clot.

What factors predispose to perianal haematoma?

The following are known factors but sometimes it just occurs for no clear reason:

- constipation
- sitting for long periods (e.g. truck drivers)
- heavy lifting
- pregnancy

What is the risk?

It is not a serious problem—it has been described as a five-day, painful, self-curing lump. However, if it is not treated early by removing the blood or clot it can heal to leave an extra lump of skin called a skin tag, which can be annoying and irritating.

What is the management?

Take simple analgesics such as paracetamol for the pain. The haematoma can subside spontaneously and feel quite comfortable in 4 or 5 days. Ointments applied topically can give some relief but are generally not helpful and don't seem to shrink the lump.

Removal under local anaesthesia

Doctors usually try to evacuate the blood or clot as this gives rapid relief and prevents the formation of the skin tag. If seen within a few hours of its onset it may be possible to drain the blood with a needle and syringe. Once a clot has formed it is removed simply by a small incision over the lump under local anaesthetic. The wound is not stitched and heals very well, but care has to be taken with bleeding through the wound.

How can it be prevented?

Perianal haematomas and haemorrhoids can be prevented by keeping the bowels regular so that constipation and straining to open the bowels is avoided. Train yourself to have a diet with adequate fibre by eating plenty of fresh fruit, vegetables and wholegrain cereals or bran. Drink lots of water during the day and get plenty of exercise, such as a brisk walk for about 30 minutes each day. Aim for softish bulky faeces that you can pass easily without straining.

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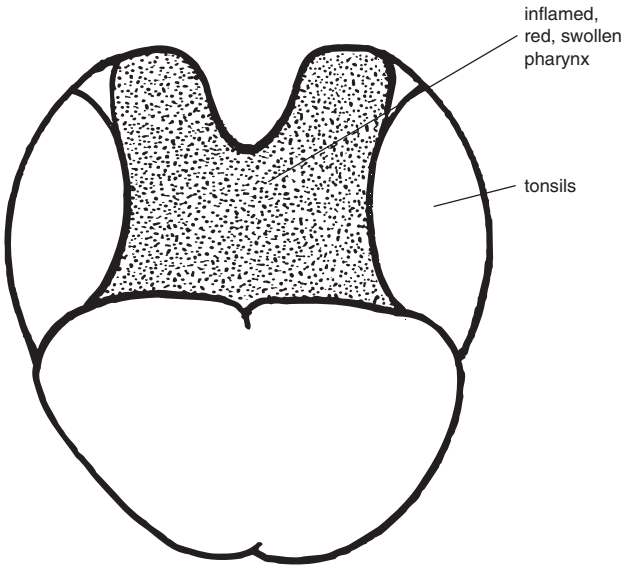
Pharyngitis

What is pharyngitis?

Pharyngitis is inflammation and infection of the pharynx, which is that part of the throat at the back of the tongue between the tonsils and the larynx.



What is the cause of pharyngitis?

The commonest cause is a viral infection, which may be part of a common cold or a direct infection. Bacteria and fungi infections are also causes. Irritation and inflammation of the pharynx can also result from irritants such as cigarette smoke, alcohol or excessive use of the voice such as talking above excessive noise. Oral sex may lead to infection with sexually transmitted diseases. Various disorders, such as diabetes, immune deficiencies such as AIDS and poor general health make people prone to pharyngitis.

What are the symptoms?

This depends on whether the infection is acute (sudden onset), which is more severe, or chronic. The following symptoms vary in severity.

- sore throat
- 'tickle' or lump in throat
- difficulty swallowing
- fever (in more severe cases)
- red, swollen throat
- possible muscular aches and pains

How common is the problem?

It is very common and is by far the commonest cause of a sore throat. On average, a person consults a doctor once each year with pharyngitis. It tends to occur in people who are overworked and fatigued.

What is the usual outcome?

With most cases of pharyngitis the throat is extremely sore for 2–3 days and then settles quickly. However, if it is due to a bacterial infection, it usually persists and you tend to feel quite ill with fever. This requires medical attention.

What is the treatment?

Self-help

- You and your throat need a rest.
- Do not smoke.
- Have a fluid or soft diet for a few days.
- Drink extra fluids: at least 8 glasses of fluid daily.
- Take aspirin or paracetamol regularly (e.g. 2 soluble tablets 4 times a day). Children should have paracetamol rather than aspirin.
- Commercial soothing lozenges and mouthwashes may help: avoid those with a topical anaesthetic effect.
- Gargles help give symptomatic relief: a salt solution is useful (mix 1 teaspoon of salt in 500 mL warm or hot water). When the solution cools, gargle as often as you wish.

Medical help

Your doctor may prescribe an antibiotic if inspection of the throat reveals severe pharyngitis due to a bacterial infection. It must be emphasised that most cases are due to viruses and antibiotics make no difference.

Phobias

What is a phobia?

A *phobia* is an abnormal fear of or aversion to a specific object or a certain situation. It is a type of anxiety disorder which can precipitate a panic attack. People with phobias tend to avoid these situations or objects and become anxious when they anticipate having to meet them. For example, people may dread the sight or touch of a spider (arachnophobia) or have a morbid fear of heights (acrophobia). These types of fears do not usually prevent people leading a normal life; they avoid the subject of the fear. On the other hand, fear of confined spaces (claustrophobia) or open spaces (agoraphobia) are more serious problems to cope with.

What are the three classifications of phobic states?

- *specific phobias*: for example, fear of spiders, snakes, dogs, toads or thunder
- *agoraphobia*: fear of open spaces or public places
- *social phobias*: fear of anxiety-provoking social gatherings

What are the most common phobias?

The 10 most common phobias (in order) are spiders, people and social situations, flying, open spaces, confined spaces, heights, cancer, thunderstorms, death and heart disease.

What is agoraphobia?

Fear of open spaces or public places is one of the most serious phobic disorders. Avoidance includes the many situations involving the issues of distance from home, crowding or confinement. Typical examples are travel or public transport, crowded shops or parklands. For some people, anywhere outside the house is a threat. They feel that they may lose control, faint or suffer embarrassment. Agoraphobia is commonly associated with depression and marital or family disharmony.

Typical specific phobias

Name of phobia	Fear of
acrophobia	heights
aichmophobia	needles/sharp objects
ailurophobia	cats
androphobia	men
anthropophobia	people
apiphobia	bees
aquaphobia	water
astraphobia	lightning
aviatophobia	flying
brontophobia	thunder
bufonophobia	toads
cancerophobia	cancer
cardiophobia	heart disease
cynophobia	dogs
dentophobia	dentists
genophobia	sex
gynophobia	women
herpetophobia	creepy crawling things
homophobia	homosexuals
hypnophobia	going to sleep
iatrophobia	doctors
musophobia	mice
mysophobia	dirt, germs
necrophobia	death
neophobia	anything new
noctiphobia	night
nyctophobia	darkness
ophidiphobia	snakes
pyrophobia	fire
taphophobia	being buried alive
sociophobia	social situations
theophobia	God
xenophobia	strangers
zoophobia	animals

What is the outcome?

The problem is not as serious as you may believe. It can be treated readily. Most people lead a normal life, especially those with a specific phobia. Panic attacks, one of the most distressing problems, can also be treated.

What is the treatment?

Self-help

To counter a phobia it is good to discipline yourself to adjust to it gradually. This is called desensitisation or graded exposure. For example, if agoraphobia makes you dread shopping, begin by visiting small local shops and then gradually move to larger shops until large shopping centres no longer seriously upset you.

Cognitive behaviour therapy

This counselling technique for more difficult problems is the method favoured by professionals. Cognitions are thoughts, and cognitive therapy involves the process of knowing or identifying, understanding or having insight into your thought processes. The first step is to be educated about the phobia—its cause, its outcome and how it can be handled. For example, the cause may be an unpleasant childhood experience based on misinformation, a scary movie or book, a painful accident or bullying at school. The behaviour component involves desensitisation in which an experienced therapist guides the sufferer through the mechanism of coping with their fear. It usually involves slow exposure to places and circumstances that frighten them and then positively reframing the awful thought processes that torment them. It can be compared with entering a cold sea gingerly, which is preferred to the shock tactic of plunging quickly into it. Good parts of therapy include relaxation techniques and group therapy where other people share their experiences. Positives are reinforced and negatives discounted. Sometimes specific medication may be prescribed. Discuss these issues with your doctor.

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Pill: the combination pill

What is the combination pill?

It is a combination of two female sex hormones that prevents pregnancy by changing the hormone balance in your body to stop ovulation (the monthly release of the egg from the ovary). There are 28-day and 21-day packets, the only difference being the 7 inactive 'sugar' pills in the 28-day packet.

How effective is the pill?

If taken according to instructions, it is at least 99% safe.

When are you safe?

The pill will prevent pregnancy after you have taken the first 7 active pills in a row although this may not apply to some of the newer types of pills.

How is it commenced?

This varies according to the type of pill prescribed, so follow the instructions that come with the pill packet. It is usual to start the 28-day pack on the 1st day of bleeding of your next period and the 21-day pack on the 5th day of your cycle or on a particular day (e.g. Saturday) after your next period starts.

When and how is it taken?

The tablet should be swallowed whole with a small amount of water. It does not matter what time of the day you take it, but once a time has been chosen it is important to get into the habit of taking the pill at the same time (e.g. after breakfast or at bedtime). To be effective to stop pregnancy, the pill must be taken at a regular time.

What if a pill is missed or taken late?

The 7-day rule

- Take the forgotten pill as soon as possible, even if it means taking two pills in one day.
- Take the next pill at the usual time and finish the course.
- If you forget to take the missed pill for more than 12 hours after the usual time, there is an increased risk of pregnancy and so you should use another form of contraception (such as condoms) for 7 days.
- If these 7 days run beyond the last hormone pill in the packet, miss out the inactive pills (or 7-day group) and proceed directly to the first hormone pill in the next pack.

How does it affect periods?

Periods tend to become shorter, regular and lighter. The blood loss may be the brownish colour of old blood. The pill also tends to stop painful periods.

Is a break from the pill necessary?

There is no reason to take a break from the pill. It is best to continue on until pregnancy is contemplated.

What if a period is missed?

If you miss a period, you should continue taking the pill but check with your doctor to exclude pregnancy.

Is it safe during lactation?

The pill can interfere with the quantity and quality of breast milk, and so it is better to use other contraception during breastfeeding. If a pill is used, the most appropriate is a progestogen-only pill.

What are the unwanted effects (side effects)?

The most common side effects are nausea (feeling sick), breast tenderness and breakthrough spotting (i.e. bleeding between your usual periods). These side effects tend to disappear after a couple of months on the pill. Other side effects include vaginal thrush (which causes itching), discolouration of the skin and feeling depressed. More serious (although uncommon) effects include migraine headaches, high blood pressure and a tendency to form clots in the veins. To check if you should not take the pill, refer to the instruction leaflet that comes with the pill, or consult your doctor. Some women feel better when taking the pill, and their skin and hair condition can improve. A special pill can be used if you have acne.

What about alcohol and other drugs?

Alcohol in moderation does not appear to interfere with the pill. Medications that can reduce the effectiveness of the pill include antibiotics, vitamin C and drugs to treat epilepsy and tuberculosis. The pill may affect blood-thinning and antidiabetic preparations. Check with your doctor.

If you are taking antibiotics, continue the pill, use another contraceptive method during the course and follow the 7-day rule when the course is finished.

What are the special rules to follow?

- Smoking creates a health risk with the pill, and so you should not smoke.
- Make sure you tell a doctor if you are taking the pill when other medicine is about to be prescribed.
- Natural products used in complementary medicine may affect the pill.
- Diarrhoea and vomiting may reduce the effectiveness of the pill—use additional contraception until you finish that particular course. (Follow the 7-day rule.)
- Report persistent or heavy bleeding between periods.
- Report any onset of blurred vision, severe headache or pain in the chest or limbs.
- Return for a checkup every 12 months while you are on the pill.
- Perform breast self-examination regularly and have a smear test every 2 years.
- Remember that the pill is highly effective, but pregnancy can occur if the pill is taken at irregular times, if intercurrent illnesses such as fever and gastric upsets develop, or if you are taking some other drugs.

Pityriasis rosea

What is pityriasis rosea?

It is a skin rash thought to be caused by a virus. It commonly occurs in young adults (especially aged 15–30) but might occur at any age. It is not considered to be contagious.

What are the symptoms?

The rash

The rash usually starts with a large spot on the trunk called a 'herald' patch because it heralds the onset of a widespread rash several days later. This patch can look like ringworm. The spots then break out over the body to cover the trunk and upper arms (a 'T-shirt' distribution) and the upper legs. The arrangement of the rash gives the appearance of a 'Christmas tree'. Rarely, the rash can cover the neck and face. The spots become oval patches (about the size of a coin) of salmon-red or copper-coloured skin with scaly margins.

Other symptoms

Patients are not ill, although there may be some minor discomfort from itching. Some patients have no itching at all, while some can have considerable itching.

What are the risks?

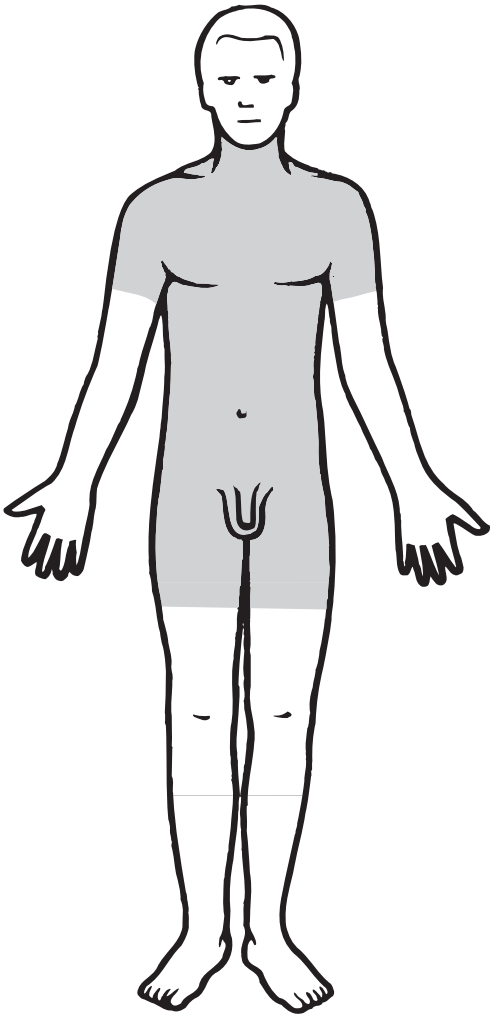
There are no risks attached to pityriasis rosea, but you should visit your doctor to make sure that you do not have some other similar skin disorder such as ringworm. No scarring will result from the skin rash unless there is a complicating infection. Second attacks are rarely seen.

How long does the rash last?

Pityriasis rosea usually runs a natural course of 4–10 weeks. There are no medicines or treatments available to shorten this course.

What is the treatment?

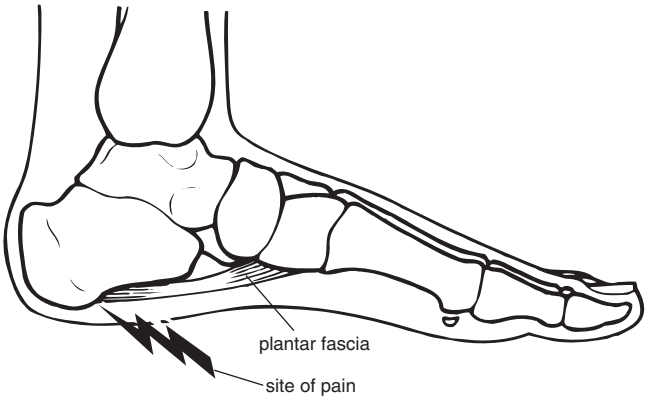
There is no special treatment for pityriasis rosea. You should lead your normal active life. If possible, expose the skin to moderate amounts of sunlight, as this tends to lessen the rash, but you must avoid sunburn. Otherwise, ultraviolet light therapy 3 times a week is helpful. Bathe and shower as usual, but use a mild soap such as Dove or Neutrogena. If itching is a bother, use some soothing lotions or creams. These include calamine lotion, calamine lotion with 1% phenol, menthol 1% in aqueous cream or urea cream. If itching is severe, your doctor will prescribe special medication which may include cortisone tablets or cream.



Typical distribution of the rash of pityriasis rosea

Plantar fasciitis

Plantar fasciitis is a common condition that causes pain under the heel of the foot. It is known also as 'policeman's heel'. The painful area is usually situated about 5 cm (2 inches) from the back of the heel on the sole of the foot.

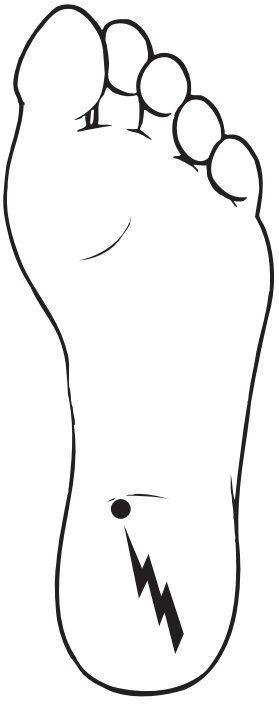


Anatomy of plantar fasciitis

What is the cause?

It is an inflammation of the site where a long ligament called the *plantar fascia* attaches to the main heel bone (the *calcaneus*). It is a condition similar to tennis elbow. One known cause is a tear of this tissue, which can happen, for example, when a runner takes off quickly. Sometimes a spur of bone develops at this spot, but the spur is not a serious problem.

The problem is not thought to be caused by faulty footwear.



The commonest site of plantar fasciitis

Who gets it?

It occurs typically in people over the age of 40, especially if they start a running activity. It occurs in both sexes. It is common in people who have to stand or walk for long periods in their job, such as policemen on a beat.

It is seen sometimes in young sportspeople.

What are the symptoms?

The pain under the heel is worse when the person first steps out of bed or gets up to walk after sitting for a long time. It is relieved after walking about, but then returns towards the end of the day after a lot of walking or standing. Resting will always ease the pain until you get up and walk. Climbing stairs also hurts.

The painful area on the heel is tender to touch, but not unbearably so.

X-rays may show a small spur on the bone, but this spur is not an indication to operate.

What is the outcome?

The pain will usually go away by itself in about 18 months, sometimes as early as 6 months. It is not a serious problem.

What is the treatment?

Rest from long walks and from running is important.

Hot and cold therapy

Alternate placing your foot in very hot and then cold water for 30 seconds each for 15 minutes twice a day. You can also use a commercially available foot hydro-massager.

Heel pads

The standard treatment is to wear a pad at all times inside the shoe or slipper to cushion the heel. The pad is made from sponge or sorbo rubber and should raise the heel about 1 cm. A hole corresponding to the tender area should be cut out of the pad so that this area does not make direct contact with the shoe. The best pad is a special inner sole (called an *orthotic aid*) that is moulded for your foot to include the arch as well as the heel. A commercially available orthotic is called Viscosport. Special strappings using non-stretch sticking tape can also be used for more severe cases.

Exercises

Perhaps the best therapy is regular stretching exericses (3 times a day) to stretch the fascia and allow it to heal. One exercise is to find a step and stand on it with the balls (front) of your feet, keeping your knees straight. Let your heels gently drop as you count to 20. Then lift your heels and count to 10 and repeat the cycle 3 times.

Injections

If the pain is really bothersome (it is often bad for 2–3 months), an injection given by your doctor can give relief for a few weeks. However, it is uncomfortable to have and generally avoided.

Plaster instructions

You have had a plaster cast applied to a limb. To allow the plaster to work properly, it is important that you:

- Lie down for the next _____ hours.
- Elevate the limb for the next 48 hours (ideally above the level of your heart).
- Move the fingers or toes around.
- Return tomorrow or whenever advised for a plaster check. Appointment: __/__/__ at _____.
- Return for a second follow-up appointment in 7–10 days.

General rules of plaster care

- Movement of the unaffected free joints (e.g. shoulder, elbow, fingers, toes, hip, knee) frequently helps reduce the swelling of the injury.
- Avoid getting your plaster wet. If it becomes wet, dry it as soon as possible. A hair dryer is suitable for this. Then return in office hours within 24 hours for a check.
- When having a shower or bath put a plastic bag over the plaster and try to keep it out of the water.
- Do not remove the plaster, cut it or modify it.
- Do not put any object under the plaster to stretch it.
- If the plaster becomes soft, very loose or broken, return in office hours within 24 hours.

Pain relief

Pain can usually be relieved by:

- elevating the affected limb
- taking a pain-killer such as paracetamol (not a very strong analgesic)
- keeping busy with interesting distractions

Very severe pain indicates abnormal swelling so you need to be seen by a doctor immediately.

Elevation

Arm

Have the hand raised so that it is higher than the opposite shoulder level (if possible). The arm can be supported on a pillow or in a sling.

Leg

Raise the foot of the bed and place the plaster cast on a pillow or cushion. The patient can lie down or sit up, as long as the leg is elevated.

Other useful tips

- The plaster will cause itchiness for a few days but this will ease.
- For a fractured leg, crutches may be provided, but these are best used after 48 hours of rest.
- The plaster can take up to 2 days to dry so treat it carefully.
- You should not stand on a leg plaster before 2 days.
- Contact your doctor if you notice a smell or discharge coming from inside the plaster.

Problems caused by swelling

Sometimes the swelling around the fracture will cause the plaster to become too tight. The patient should be brought back to the doctor or to the emergency department of the hospital *immediately* if any of the following develop:

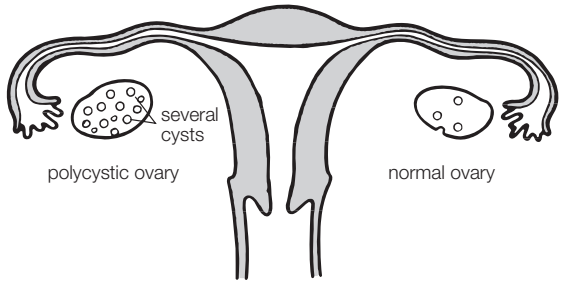
- marked swelling of the fingers or toes
- blueness of the fingers or toes
- loss of feeling or numbness in the fingers or toes
- a tight pain not eased by elevation of the limb
- inability to move the fingers or toes

Polycystic ovary syndrome

What is polycystic ovary syndrome (PCOS)?

PCOS is the name given to a syndrome in which women have an enlarged ovary containing many small cysts, plus a number of specific symptoms.

The polycystic ovary is detected on an ultrasound scan but not all women with these enlarged ovaries have the syndrome. However, all women with PCOS have polycystic ovaries.



What are the symptoms?

There are 4 main features of the syndrome:

- subfertility: achieving pregnancy is more difficult
- menstrual problems:
  — scanty or no periods
  — irregular, usually lighter, bleeding
- weight gain
- excess hair on face (may be on arms and legs)

Other features are:

- acne
- increased miscarriage rate
- insulin resistance
- impaired glucose tolerance

Who gets PCOS and how common is it?

PCOS can affect any woman between late adolescence and menopause. About 1 in 5 (20%) of premenopausal women have polycystic ovaries while 5–10% have the syndrome.

What is the cause of PCOS?

The exact cause is unknown. There is a hereditary factor with children of those affected having an increased risk. PCOS is believed to be due to an imbalance of hormones produced by the ovary. The master gland in the brain (the pituitary) senses this problem and releases increased amounts of hormones which stimulate the ovary to produce more cysts and thus more 'eggs'. However the eggs (ova) do not seem to mature to ovulation.

How is PCOS diagnosed?

Pelvic ultrasound and blood tests to measure hormone levels are the main investigations. Removal of tissue lining the uterus (*endometrial biopsy*) is also a useful investigation.

What do polycystic ovaries look like?

The ovaries are enlarged with a thick white surface. They contain many cysts—at least 10—which are usually quite small, measuring about 2–8 mm.

What are the problems with PCOS?

The central problem is persistent lack of ovulation thus causing a fertility problem.

Biochemical problems include diabetes (type 2) and high cholesterol. Other concerns are an increased risk of hypertension, coronary heart disease and cancer of the uterus.

What is the first line of management?

Lifestyle modification requires attention in the first place. It is helpful to join a support group to share issues about the syndrome.

Weight control

The most important first line treatment is achieving weight loss for those who are overweight or obese. This can be difficult and may take a year or so. The help of an accredited practising dietician is advisable. The diet is based on low carbohydrate and energy control similar to that used for diabetes. Weight loss alone in obese women with PCOS can restore normal ovarian function.

Exercise

Regular exercise to control weight and keep fit is needed (e.g. 30 minutes of brisk walking each day).

Other management strategies

Hair removal

Unwanted hair can be removed by waxing or electrolysis.

Hormone therapy

For women not trying to conceive, the use of one of the oral contraception pills will help regulate cycles and improve troublesome symptoms including acne.

For those desiring to get pregnant, hormones used to induce ovulation and thus conception can be given by a specialist.

Surgical therapy

The modern method is to use a laparoscope to make several punctures in the ovary with a hot needle. This is called *Laparoscopic Ovarian Diathermy*. This has the ability to induce ovulation and increase the possibility of getting pregnant.

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Polymyalgia rheumatica

What is polymyalgia rheumatica?

Polymyalgia rheumatica (*PMR*) is an inflammatory rheumatic disorder of older people that affects the muscles of the shoulder and hip regions of the body. 'Poly' means many and 'myalgia' means painful muscle, so it stands for pain in many muscles.

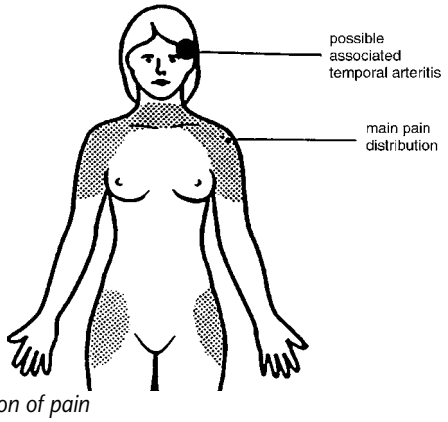
Most people experience aches and pains as they grow older and these usually cause little trouble and respond well to simple pain-relieving medication, but PMR is quite a different matter.

How does it start?

PMR may come on gradually but in many cases it strikes rather suddenly, appearing over one or two weeks. It sometimes follows immediately after a flu-like illness. Some people describe going to bed feeling fine but waking up the next morning feeling very stiff and sore.

What is the cause of PMR?

The actual cause is not known. The experts, who have so far been unable to identify an underlying cause, believe it is an autoimmune reaction of the body against its own muscle tissue. This results in an inflammatory reaction.



Typical distribution of pain

Who gets PMR?

Older people get it with the typical age of onset being between 60 and 70 years. It is very rare under the age of 50 years. It affects both sexes but is far more common in women. PMR almost exclusively affects white people especially those of Northern European background. It appears to be a condition of cooler climates.

What are the symptoms?

Main features:

- painful early morning stiffness
- muscle aches and pains especially in shoulders, neck and upper thighs
- stiffness after sitting or inactivity for long periods
- difficulty getting out of bed
- difficulty walking up and down stairs

Everyday problems:

- getting out of chairs
- combing hair
- putting on coat
- car driving for long periods

Possible general problems:

- malaise (feeling unwell)
- fever
- anorexia
- weight loss
- depression

There is no weakness, wasting of muscles or arthritis (inflammation of joints).

How is PMR diagnosed?

Doctors rely firstly on the typical history and early diagnosis can be very difficult. There is no specific test but a test called the ESR can pinpoint the diagnosis and give an indication of the progress of the disorder. PMR can be mimicked by the myalgia caused by statin treatment for high cholesterol.

What are the risks?

There are cases where the problem has disappeared over time but the condition can cause inflammation of arteries including the temporal artery in the head. This has the potential to cause blindness in sufferers so we have to be watchful about this possibility of temporal arteritis.

What is the treatment?

Fortunately PMR and also temporal arteritis respond very well to cortisone medication. In fact patients feel dramatically better within a day or two of taking the tablets. It is usually necessary to take the medication for PMR for many months. The dose required to control the symptoms is relatively small but there are side effects which are usually minor. Your doctor will explain these and help to control them.

Self-help measures

- Apply heat such as warm compresses to the painful muscles.
- Organise gentle massage to the neck and sore muscles.
- Take mild analgesics such as aspirin or paracetamol for troublesome pain.
- Have a healthy diet; no special diet is required.
- Avoid physical and mental stress.

When to report to your doctor

If you develop any of the following problems:

- disturbance of vision
- throbbing headache
- high fever
- pain in the jaw muscles on chewing
- unexplained symptoms

Postnatal depression

It is quite common for women to feel emotional and flat after childbirth; this is apparently due to hormonal changes and to the anticlimax after the long-awaited event. There are two separate important problems:

1. postnatal blues
2. postnatal (or postpartum) depression

Postnatal blues

'The blues' are a very common problem that arises in the first 2 weeks (usually from day 3 to day 5) after childbirth.

What are the symptoms?

- feeling flat or depressed
- mood swings
- irritability
- feeling emotional (e.g. crying easily)
- tiredness
- insomnia
- lacking confidence (e.g. in bathing and feeding the baby)
- aches and pains (e.g. headache)

What is the outcome?

Fortunately 'the blues' are a passing phase and last only a few days. It is important to get plenty of help and rest until they go away and you feel normal.

What should you do?

All you really need is encouragement and support from your partner, family and friends, so tell them how you feel.

- Avoid getting overtired: rest as much as possible.
- Talk over your problems with a good listener (perhaps another mother with a baby).
- Accept help from others in the house.
- Allow your partner to take turns getting up to attend to the baby.

If the blues last longer than 4 days, it is very important to contact your doctor for advice.

Postnatal depression

Some women develop a very severe depression within the first 6–12 months (usually in the first 6 months) after childbirth. They seem to get 'the blues' and cannot snap out of it. The onset is usually in the first three days after childbirth.

What are the symptoms?

Some or all of the following may occur:

- a feeling that you cannot cope with life (e.g. hopelessness, helplessness)
- continual tiredness
- feeling a failure as a mother
- sleeping problems
- eating problems (e.g. poor appetite or overeating)
- loss of interest (e.g. in sex)
- difficulty in concentrating
- tension and anxiety
- feeling irritable, angry or fearful
- getting angry with the baby
- feeling rejected
- marital problems (e.g. feeling rejected or paranoid)

What is the outcome?

This is a very serious problem if not treated, and you cannot shake it off by yourself. There is a real risk of a marriage breakdown because you can be a very miserable person to live with, especially if your husband does not understand what is going on. If it is severe, there is a risk of suicide and even of killing the baby.

What should you do?

You must be open and tell everyone how you feel. You need help. Take your baby to the childhood centre for review. It is most important to consult your doctor and explain exactly how you feel. Your problem can be treated and cured with antidepressant medicine.

Support groups

There are some excellent support groups for women with postnatal depression, and it is worth asking about them and joining them for therapy.

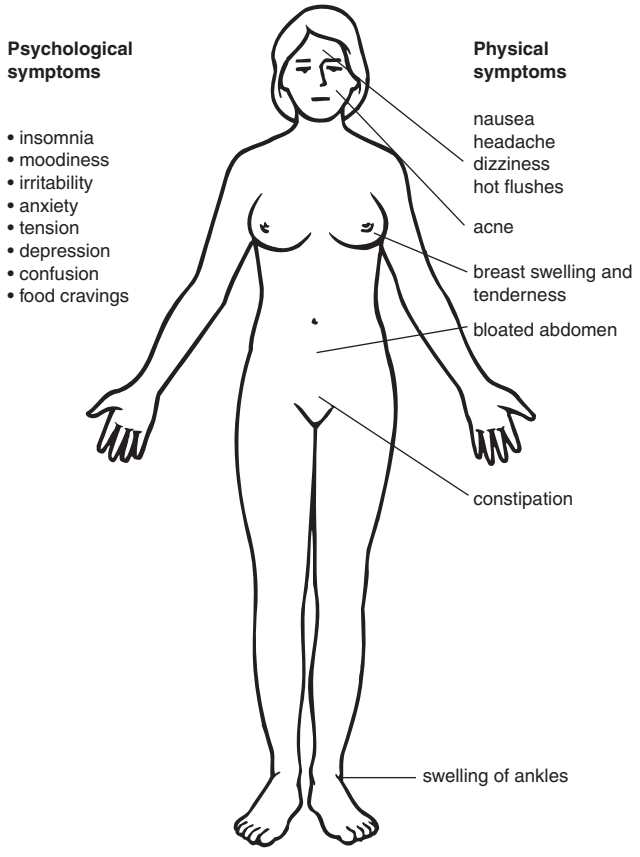
Premenstrual syndrome

What is the premenstrual syndrome?

The *premenstrual syndrome*, which is commonly called *premenstrual tension* or *PMT*, is a set of symptoms, both physical and psychological, that some women experience before their periods. These symptoms usually go away when the period starts. The symptoms are caused by hormonal changes in the body before the period and vary from woman to woman. The build-up of fluid in the body at this time is an example of this.

Is it common?

Yes; possibly up to 90% of women experience some symptoms, which can vary from minor to severe. PMT tends to increase with age.



Symptoms of premenstrual tension

What are the symptoms?

The important symptoms are summarised in the diagram, but the commonest symptoms are moodiness, irritability, tension, headache, constipation, sore breasts and bloated feelings.

What can be done about these symptoms?

Insight

Understanding your symptoms and why they occur can be a big help. It is helpful to be open about your problem and tell your family and close friends about these symptoms. Consider joining a support group.

Keep a diary

Keep a list of your main symptoms and note when they occur over a 2–3 month period. Use this information to help plan around your symptoms; for example, avoid too many social events and postpone demanding business appointments.

Lifestyle changes

- *Diet*. Eat regularly and sensibly: eat small rather than large meals; avoid salt, caffeine and excess fluids. If necessary, reduce your weight to ideal level.
- *Exercise*. Regular exercise often helps (e.g. swimming, aerobics, tennis).
- *Relaxation*. Plan to do things that you find relaxing and enjoyable during this time. Stress aggravates PMT, so reduce it wherever possible.
- *Proper dress*. Sensible dressing to cope with breast tenderness and a bloated abdomen is useful (e.g. a firm-fitting bra and loose-fitting clothes around the abdomen).
- *Medicine*. Some medicines may help those with more severe symptoms, so discuss these options with your doctor. Examples of proven treatment used for premenstrual tension include vitamin B6 (pyridoxine), chaste tree (*vitex angus castus*) and certain antidepressant agents. It is worth taking pyridoxine 100 mg daily for 6 months. If PMT persists discuss it with your doctor.

Prostate: your enlarged prostate

What causes 'trouble with the waterworks'?

This is usually caused by enlargement of the *prostate gland*. Nearly every man over 45 years of age has some degree of this enlargement, which is called *benign hypertrophy*. Some drugs cause trouble, especially when an enlarged prostate is present. These drugs include alcohol, some drugs used to treat depression, Parkinson's disease and irregular beats of the heart, and over-the-counter ephedrine-like compounds for coughs and colds.

How common is the problem?

Although enlargement of the prostate is common in men over 45, it rarely causes trouble before 50. By the age of 55 at least 50% of men will have 'waterworks trouble'. This increases to 80% of men over 80. Serious urinary trouble affects 2 in 10 elderly men.

What are the symptoms?

- frequency of urination
- an urge to urinate without much warning
- waking at night with this urge
- difficulty starting and sluggish stream, especially first thing in the morning
- a tendency to dribble after urinating, with wetting of pants
- a need to urinate a second time after only 20 minutes

The symptoms vary somewhat, but pain is a rare problem.

What is the prostate gland?

It is a brownish gland about the size of a walnut that surrounds the opening of the bladder and about the first 2.5 cm (1 inch) of the urethra (the tube passing from the bladder to the penis). It produces substances that make up a small part of the semen.

What are the risks?

Hypertrophy of the prostate is not dangerous, but it tends to squeeze the urethra and makes it difficult for the urine to pass through. This can cause the symptoms of dribbling and poor stream. More serious problems include:

- infection of urine
- sudden blockage (called *acute retention* of urine)
- slow blockage (called *chronic retention* of urine)

A catheter will usually be necessary to relieve a severe obstruction.

What will your doctor do?

Your doctor will perform a rectal examination with a gloved finger to feel the prostate and then may refer you to a urologist for special tests. Cancer of the prostate has to be excluded. A blood test called the PSA can test for cancer. The doctor will check what drugs you are taking to make sure these are not aggravating the problem.

What is the treatment?

Non-surgical

At least 1 in 3 mild cases will not require an operation. Although we cannot cure an enlarged prostate, you can learn to live with it for some time.

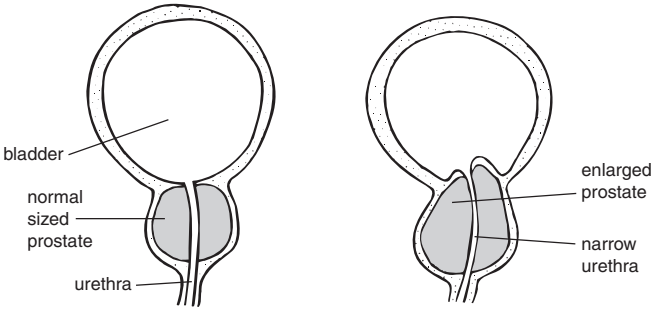
- Avoid or cut down alcohol, especially with and after an evening meal.
- Avoid fluids for at least 3 hours before retiring.
- Get up immediately at night when you wake up with the urge to go.
- Visit the toilet when you need to (do not hang on) and wait a while to make sure you empty your bladder completely.

Drugs

Fortunately there are now drugs that can improve the flow of urine in many patients. Your doctor will prescribe them if appropriate.

Surgical

This is eventually required for most prostate problems. About 1 in 10 men will need a prostatectomy. This usually is done through the penis, using an instrument about as wide as a pencil. The operation is called a *transurethral resection* (TUR).



Normal prostate *Enlarged prostate*

Prostate: your prostate operation

Why is the operation needed?

You have developed enlargement of your prostate, which cannot shrink by itself or with drugs. This enlarged tissue needs to be removed to allow your urine to flow normally from your bladder to your penis. If the obstruction continues, it can damage your bladder and possibly your kidneys. It may block off the urine completely and cause considerable pain. This emergency situation is called *acute retention*.

What will the operation do to your stream?

If successful, the operation will give you a good stream with full control, which you probably have not had for years. You will soon be able to pass urine normally without dribbling and will not have to get up more than once to urinate during the night.

How is the operation performed?

This is usually done through the penis. The urologist passes an instrument about as wide as a pencil through the urethra to cut away the enlarged prostate. This instrument (a *resectoscope*) has a loop of wire at its tip, which can cut tissue. It has a miniature telescope or camera and light to allow the surgeon to see clearly to slice and 'nibble' away pieces of the prostate from inside the urethra, thus making it nice and wide.

What anaesthetic will I have?

Usually a local anaesthetic is used—you will be made numb from the waist down for about 4 hours. This is done by giving a spinal injection. Sometimes a general anaesthetic may be necessary.

What happens after the operation?

A catheter is left in the urethra to drain the bladder for about 1–2 days. There is usually some blood loss for a few days. Taking the catheter out is simple and painless. You are in hospital for about 4–5 days. Although it tends to burn and be erratic at first, your urine stream will soon become strong and controlled.

What are the chances of becoming incontinent?

This is rare. Usually after 2 days of incontinence you begin to return to normal.

What about my sex life?

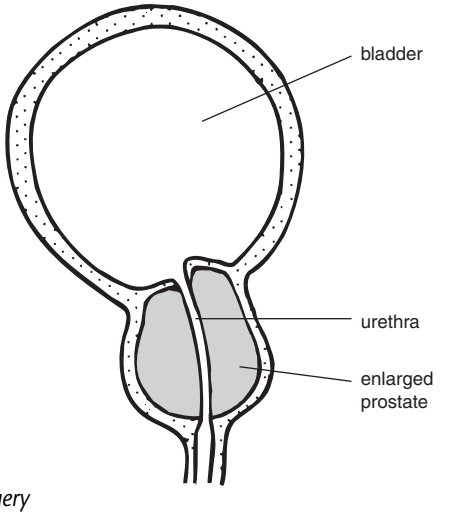
In most people the sexual desire and ability remains. The ability to get an erection soon returns and satisfactory intercourse is possible about 1–2 months later. You will have an orgasm, but you do not ejaculate fluid (semen) outwards. It goes back up into the bladder. This is quite harmless, and the fluid passes out later in the urine.

Can I become impotent?

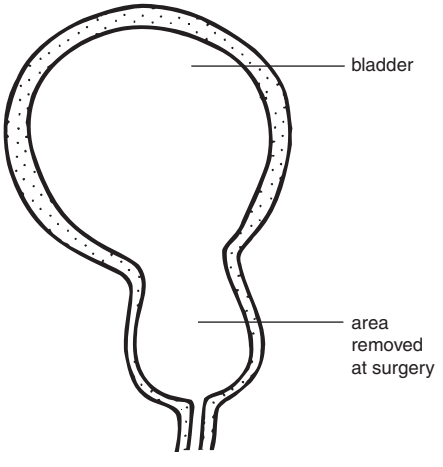
This can occur but is most unusual—less than 1 in 10 men have a problem. If you have had a problem before the operation, it is unlikely to improve it.

What happens after I leave hospital?

Like after any operation, you make steady and good progress, with gradual improvement of your urination. Sometimes infection and bleeding can cause minor setbacks. You should take it very easy for 2–3 weeks, but should be well enough to return to work in about 4 weeks.



Before surgery



After surgery

Pruritus ani

What is pruritus ani?

Pruritus ani simply means 'itch of the anus' or 'itchy backside'. It is a very common disorder of the skin surrounding the anus. In children threadworms may be suspected; however, it is usually seen in adult males with considerable inner drive, often at times of stress and in hot weather when sweating is excessive.

What are the causes and aggravating factors?

It can be caused or aggravated by:

- medical problems such as eczema, threadworms, antibiotic treatment, diabetes and fungal infection
- tinea cruris or 'jock itch', which has to be ruled out
- local anal disorders such as piles, fissures and warts
- poor hygiene
- excessive sweating (e.g. due to tight clothing such as panty hose in summer)
- contact dermatitis caused by dyed or perfumed toilet tissue, soap, powders or clothing
- overwork, both physical and mental
- obesity

Rules of treatment

1. Scratching

Stop—it's taboo! If you scratch at night, wear light cotton gloves to bed.

2. Bathing

Avoid hot water. Excessive showering and scrubbing is also bad for this condition. Use a cream such as bland aqueous cream for cleaning rather than soap.

3. Drying

Keep the area as dry and cool as possible. After washing, dry gently and thoroughly with a soft towel or soft tissue: do not rub. Warm air from a hairdryer is very useful.

4. Bowel movements

Keep bowels regular and smooth by eating plenty of high-fibre foods such as bran, fresh carrots and apples. Some doctors claim that your bowel actions should be so smooth and complete that toilet paper should not be necessary.

5. Toilet

Clean gently after bowel movements. Use soft paper tissue (avoid pastel tints), then clean with tufts of cottonwool with aqueous cream or bland soap and water. The best way is to use cottonwool wetted with warm water only.

6. Soaps and powder

Do not use perfumed soaps and talcum powder, including baby powder. A neutral soap such as Dove or Neutrogena is preferable.

7. Clothing

Wear loose clothing and underwear. In men, boxer shorts should be used in preference to jockey shorts. Cottons should be used. Let the air circulate in the area. At times a skirt but no underpants (in women) is desirable. Avoid panty hose if possible.

8. Topical creams

Do not use ointments or creams unless your doctor has prescribed them. If a cream has to be used, simple creams may be the most soothing (e.g. toilet lanoline).

Seek your doctor's advice before using 'over-the-counter' prescriptions. Your doctor may prescribe a special cream.

> **Remember**
>
> Pruritus ani will certainly settle with this plan of management.

Psoriasis

What is psoriasis?

It is a chronic skin disorder in which red or deep pink raised patches covered by white scales appear on the skin. It usually causes no discomfort but it can get slightly itchy, especially on the scalp or around the anus. The main problem is the unsightly appearance of the rash, but fortunately it is usually covered by clothing. You may have a single patch or several large ones. The cause of psoriasis is unknown and it shows a tendency to run in families.

Common sites of psoriasis

What part of the body is usually affected?

Psoriasis commonly affects the elbows, knees and scalp, although patches can surface anywhere on the body, including under the nails of the fingers and toes. It occurs less commonly in the armpits, under the breasts, on the genitals and around the anus.

Is psoriasis common?

Yes; it affects about 1 in 40 people. It appears most often between the ages of 10 and 30, and most cases are mild.

How does it happen?

The skin in the patches of psoriasis is growing much faster than normal skin. As your skin is worn away, it is replaced by cells produced beneath the surface. In psoriasis the normal rate of cell production is speeded up, and this does not allow the cells to manufacture a substance called *keratin* that gives skin its hard surface. The result is unsightly flaking of the skin.

Is it serious?

No; it does not usually affect general health. Some people (about 5% of those with psoriasis) can develop a painful arthritis in the joints.

How is psoriasis diagnosed?

A doctor can make a diagnosis on the appearance of the rash without the need for tests. If there is any doubt, a piece of skin can be removed for examination (a biopsy).

What are other important facts about psoriasis?

- It is worse in winter, due to the relative lack of sunlight.
- An outbreak is often triggered by a period of mental stress.
- Yellow blisters can occur in patches on the soles and palms.
- It is most unlikely to appear on the face.
- It should not prevent you from enjoying a normal life.
- It can temporarily disappear, especially during summer.
- It tends to flare up around puberty and the menopause in women.

What is the treatment?

There are many treatments, depending on the severity of the condition and the nature of your skin. It is best to keep the treatment as simple as possible. It is worth noting that no special diet has proved successful as a treatment for psoriasis.

For many people, careful sunbathing or using an ultraviolet lamp helps clear up psoriasis. However, if you have sensitive skin you must take care not to become sunburnt, because this can make the condition worse. The use of coal tar is a time-honoured treatment for psoriasis. Some patented preparations are messy, but patients should persevere with this effective and safe treatment.

Your doctor will be able to advise you about the best drugs to treat your condition. A cautious approach is advised.

Note

- Psoriasis is not an infection and is not contagious.
- No one has a cure for psoriasis—beware of quack 'cures'.
- Avoid sunburn.

Rearing a happy child

As parents we want our children to be happy and to grow to be well adjusted. We want to give them the best possible opportunities. We cannot guarantee that our children will be happy, but they have certain basic needs and dreams that we should try to fulfil.

Our children did not ask to be born. God has worked with us to give this gift to the world, and we have to treat this special person with love, care and due responsibility. We must realise that children are not all alike, and that each is an individual with his or her own special personality and needs. However, every person has the same basic needs that require attention. These needs include comfort, security, food, activity, warmth and proper sleep.

Being a good parent is one of the hardest and most challenging jobs in the world, and most parents do a wonderful job in raising children. Some important basic needs of children follow.

Children need love

> Love is to a child what sunlight is to a flower.

Children are not 'spoiled' by too much love, but rather by too little. The little 'brat' is usually the child who is neglected in some way and is seeking attention.

Children have 'antennae'—they can sense feelings towards them. The child who is loved knows it and develops into a contented, mature adult.

Love has to be unconditional—no strings attached. Children have to receive genuine love, for their own sake—not because they are pretty or talented or have great personalities. No matter who they are, or what they look like, or how they perform at school or sport, they all need encouragement and praise so that they have a healthy self-esteem.

Love is not being possessive and clinging to children with smothering affection or showering gifts on them. Love is common sense.

Children need security

A feeling of security is vital to children. It comes not only from being loved but also from growing up in a secure home that is free from fighting parents, child abuse, over-interference from brothers and sisters and the problems of drugs (such as alcohol abuse). A warm bed, sufficient food and clothing are all part of the feeling of security.

Children need play

Children need to be active and creative; they need to be given the opportunity to express themselves freely. 'Make believe' play is important, so that they can work through their fantasies and frustrations.

Some rules for healthy and happy play are:

- Play with parents.
- Play in a supervised playground.
- Have playmates.
- Imitate the jobs of parents/other adults.
- Play with sand and water (a sandpit is great).

Children need discipline

Children need the security of firm, loving discipline. They need to be protected from dangerous toys, games and situations. We must draw the line between wholesome freedom and allowing them to do as they like. It is important for children to learn early that there are certain limits in behaviour. They must learn to respect their own and other people's possessions.

Be consistent with your discipline. Never make threats that you cannot or will not carry out. Taking away certain privileges for a while (rather than physical punishment) when children are naughty seems to work well.

Children need honesty

It is important to be honest with children. They learn to resent incorrect and illogical decisions and comments from their parents. This means being honest when explaining things that hurt, such as an injection or a visit to the dentist. We must also be fair in our comments about others, including their race and religion.

Remember

- Parents are heroes and role models for their children. Don't let your children down.
- Parents are the best teachers.
- At times parents need the wisdom of Solomon.

Reflux in infants

What is gastro-oesophageal reflux?

Reflux is where the food in the stomach overflows back into the oesophagus (gullet). It often causes a baby to bring up or vomit milk after a feed.

A mild degree of reflux is normal in babies, especially after they burp; this condition is called *posseting*. However, the reflux can be quite severe in some babies, who appear to vomit after their bottle or breastfeeding.

What are the symptoms?

Milk will flow freely from the mouth soon after feeding, even after the baby has been put down for a sleep. Sometimes the flow will be forceful and may even be out of the nose.

Despite this vomiting or regurgitation, the babies usually are comfortable and thrive. Some infants will cry, presumably because of heartburn.

What is the outlook?

Reflux gradually improves with time and usually ceases soon after solids are introduced into the diet. Most cases clear up completely by the age of 9 or 10 months, when the baby is sitting. Severe cases tend to persist until 18 months of age.

Contact your doctor should any unusual symptoms appear (such as green or blood-stained vomit or projectile vomiting), or if your baby is distressed after feeds or stops putting on weight.

What is the treatment?

Simple home measures

The baby's stomach can empty more quickly if you elevate the head of the cot by about 10–20 degrees and place the baby on his or her left side for sleeping. Also, you could place the child upright in a suspended 'swing' for periods of about 30–60 minutes after feeds when awake. The old 'bucket' method, in which the child is placed in a bucket, is not necessary.

Feeding

It is better to give small feeds quite often rather than large infrequent feeds. It is best to avoid fatty and spicy foods in older children.

Thickening of feeds

Giving the baby thicker feeds usually helps those with more severe reflux. Parents can add a thickener to existing feeds or use a pre-thickened formula. The old-fashioned remedy of using cornflour blended with milk in bottles is still useful.

Bottle-fed babies (powdered milk formula)

Carobel:	Add slightly less than 1 full scoop per bottle.
Gaviscon:	Mix slightly less than ½ teaspoon of Infant Gaviscon Powder with 120 mL of formula in the bottle.
Cornflour:	Mix 1 teaspoon with each 120 mL of formula. Check with your doctor or nurse for the proper method.
Karicare:	This formulation is easy to use but is more expensive. Give according to the manufacturer's instructions.
S 26 AR and Enfalac AR:	Other commercial thickening formulas.

Breastfed babies

Carobel:	Add slightly less than 1 full scoop to 20 mL cool boiled water or 20 mL expressed breast milk and give just before the feed.
Gaviscon:	Mix slightly less than ½ teaspoon of Infant Gaviscon Powder with 20 mL cool boiled water or expressed breast milk and give just after the feed.

Key points

Reflux:

- is common
- improves with age
- usually clears up by 9 months of age
- is helped by elevating the cot
- is helped by thickening the feeds
- is helped by frequent small feeds
- is helped by propping up the baby after feeds

Restless legs syndrome

What is restless legs syndrome (RLS)?

RLS, also known at *Ekbom's syndrome*, is a rather common movement disorder of the nervous system where the legs feel as though they want to exercise or move when the body is trying to rest. The major complaint of sufferers is of disruption both to sleep and of relaxing activities, such as watching television or reading a book. Prolonged car or plane travel can be difficult.

RLS is frequently an undiagnosed disorder because people often don't complain about it to their doctor. The diagnosis is made on the history—there are no special diagnostic tests.

Who gets RLS?

Anyone can get it and it is common. A Canadian study reported that 15% of people sampled reported 'leg restlessness at bedtime'.

Its prevalence increases with age so it mainly affects elderly people. Women are more prone to get RLS and it is aggravated by pregnancy.

What is the cause of RLS?

The exact cause of primary RLS is not clear but there appears to be a problem with the function of a chemical-transmitting substance in the central nervous system. It is not related to exercise and does not appear to follow strenuous exercise.

What are the medical conditions that can cause RLS?

Symptoms of RLS have been found to be associated with iron deficiency, anaemia, kidney failure (uraemia), hypothyroidism and pregnancy. It is advisable to have iron studies done in sufferers. If low iron levels are found, treatment with iron and vitamin C tablets is recommended. RLS in pregnant women usually ceases within a few weeks of delivery. Patients with uraemia have been cured by kidney transplantation but not by dialysis.

Certain drugs can cause it. These can include antihistamines, antisickness tablets, antidepressants and the major tranquillisers used in psychiatry. Some drugs used to treat hypertension have also been implicated.

What are the symptoms of RLS?

There is an urge to move the legs upon resting, particularly after retiring to bed. This urge is a response to unpleasant sensations in the legs, especially in the calves. The sensations are commonly and variously described as crawling, creeping, prickly, tingling, itching, contractions, burning, pulling or tugging, electric or shock-like. However, sometimes patients are unable to describe the sensation or refer to it as simply a compulsion to move the legs.

The problem can vary from a minor irritation to a severe disabling condition.

In some patients the arms are affected in a similar way. The symptoms seem to be aggravated by warmth or heat.

Most patients with RLS experience periodic jerking limb movements (also called *nocturnal myoclonus*) during sleep and sometimes while awake.

What are the risks or complications?

RLS is not a serious or life-threatening problem and there are no known complications. The disturbing effects are mainly social or psychological. Work, leisure and personal relationships can be undermined. In some instances patients have become severely depressed or suicidal.

What is the outlook?

Although it can be a distressing problem that can come and go for years it usually responds well to treatment.

What is the treatment?

Self-help

You may have found that something works for you so keep to that routine. Avoid any substances or factors that you know or suspect affect you.

- Use activities that can reduce symptoms; for example, a modest amount of walking before bedtime, massage or prescribed exercises. Try leaning against a wall with your hands, bending one knee and straightening the other until a stretch is felt in the calf.
  Note: Getting out of bed and going for a walk or run does not seem to help RLS.
- Good sleep hygiene is advised, namely regular sleeping hours, gradual relaxation at bedtime and avoidance of non-sleep activities in bed (e.g. reading, eating).
- Follow a very healthy diet. Avoid caffeine drinks, smoking and alcohol.
- Try keeping the legs cooler than the body for sleeping.
- *Exercises*: A popular treatment is gentle stretching of the legs, particularly of the hamstring and calf muscles for at least 5 minutes before retiring. This can be done by lying on your back and using a wide crepe bandage, scarf or other length of material around the foot to stretch and then relax the legs.

Medication

If the simple measures do not work, taking two paracetamol tablets and/or a small dose of a mild muscle relaxant such as diazepam or clonazepam one hour before bedtime may be effective.

Other drugs that have been used with effect include codeine, levodopa (use to treat Parkinson's disease) and baclofen. Avoid antihistamines and the major tranquillisers. Quinine, which is good for cramps, is usually unhelpful.

Retirement planning

Retirement can be a most enjoyable period of the life cycle, one of productivity and self-realisation. However, for many people it can bring considerable unforeseen sadness and stress. This is mainly brought about by inadequate planning and changes of relationships. Studies show that very few people plan for it until just before the time.

What are the main problems?

Common problems in retirement are:

- loneliness
- boredom
- financial worries

Loneliness

Loneliness is a terrible problem; it can lead to depression and a feeling of worthlessness. A common mistake is to sell the family home and move to another location, usually in a small unit. This separation from old friends, neighbours and family can cause much heartache. It often happens to country people who move to the city. You need your family around you, especially if your spouse dies. You should give consideration to keeping your family home, because it encourages your family to visit you. Children often interpret a move to a small unit as 'don't come and stay with us', although this may not be the intention.

Financial security

You really need sound advice for a secure financial future, including investments. Try to work out your finances 5 years in advance and allow for inflation and home maintenance. If you own your home and car, you have a good basis.

Health

You need good health to enjoy your deserved retirement. Take care not to get into bad eating and exercise habits. Plan a sensible, healthy, balanced diet. Avoid smoking and excessive drinking. Regular and effective exercise is important. Appropriate exercises are walking for 20–30 minutes each day, swimming, cycling and golf.

Activities

Retirement gives you the opportunity to devote more time to those interests and hobbies that you already enjoy. It will also give you the chance to pursue new ones. There are many agencies that will provide information on programs for the retired, adult education courses (especially in the arts and crafts) and community work. If your hobby can supplement your income, that is a bonus.

Useful activities include sports such as bowls, golf and tennis, travel, nature walking, voluntary or part-time work. Many retired people get considerable pleasure out of carpentry and woodwork.

Housing

Keep your family home if you can. Carefully weigh up the pros and cons of moving—it can bring much stress, worry and financial problems. As you get older it is most important to have transport, shopping and medical facilities nearby.

Companionship

Good friends and neighbours are excellent 'insurance policies' for a happy retirement. Try to keep in contact with your valued friends. The relationship between husband and wife will be tested, as you have to spend much more time together. Sadly some couples cannot cope with this 'under my heels' syndrome and marital breakdowns do occur. Make sure this does not happen to you.

Rheumatoid arthritis

What is rheumatoid arthritis?

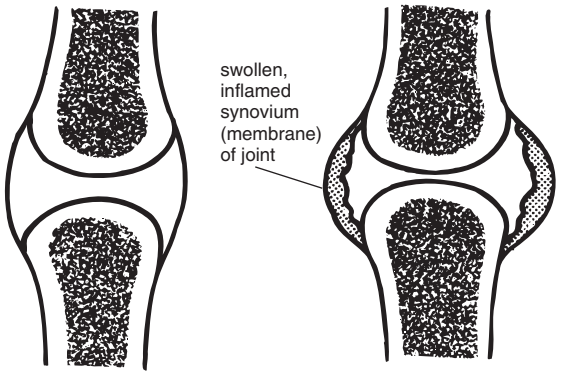
Rheumatoid arthritis is a disease of the joints, usually the smaller joints of the body. Many people believe wrongly that this is always a disabling, severe condition. In fact, it may be mild and can be well controlled using modern medicine. It is not infectious, but no one is able to say what triggers it. There is no cure for this condition, but all patients can be treated.

What are the symptoms?

The symptoms will vary a great deal from person to person, as well as from day to day. However, some of the common symptoms include:

- stiffness and tenderness of the small joints, especially of the wrist, hands and feet (the base of the fingers, thumbs or toes can be affected; less commonly it can affect the larger joints such as the knee, shoulder, ankle and neck)
- tiredness
- morning stiffness

In summary, the main symptoms are pain, stiffness and swelling of the small joints.



How is it diagnosed?

After being suspected by the doctor upon examination, rheumatoid arthritis can usually be diagnosed by tests, including X-rays of the hands and special blood tests.

How common is the problem?

About 2 persons in 100 suffer to some extent from rheumatoid arthritis. It is more common in females. Most sufferers are between 40 and 60 years of age, but the disease can affect people in any age group. However, the majority of patients have little or no long-term problems and only 1 patient in 10 is severely affected.

What are the risks?

In severe cases the swollen and deformed joints may become partly or completely dislocated, causing considerable discomfort and problems with walking if the knee or foot joints are affected. The tendons may become so weak that they can snap. A special problem is the neck, which can become unstable so that manipulative procedures can be dangerous and cause paralysis.

What is the treatment?

Exercise

It is important to keep fit. Walking and swimming are to be encouraged. Many local councils and physiotherapists offer swimming and other forms of hydrotherapy in heated pools. Home exercise routines to prevent muscle weakening can be provided by your physiotherapist or doctor.

Rest

Rest is important and depends on how you feel. It must be sensibly balanced with exercise. If an exercise causes pain, it should be altered or reduced.

Joint movement

Each joint affected should be put through a daily full range of motion to keep it mobile and to reduce stiffness. Protect any weakened joints or tendons by lifting gently and smoothly rather than in a jerking motion.

Heat and cold

For stiff joints a hot-water bottle, warm water or a heat lamp can help. For morning stiffness an electric blanket or a warm shower can be helpful. Sometimes cold packs or water are appropriate, for example over a hot, tender joint.

Diet

There is no special diet. No specific food has caused arthritis and no specific diet will cure it. However, a nourishing and well-balanced diet including adequate fibre will promote health and a sense of well-being. Maintain a normal weight to lessen the burden on your joints.

Medication

There are many effective pain-killing and anti-inflammatory drugs available to treat rheumatoid arthritis. The basic drug is likely to be aspirin in high doses, but it can cause ringing in the ears and other unpleasant effects. Your doctor may have to experiment for a time before finding the best drugs for you. Newer, more effective drugs are becoming available year by year.

Surgery

Occasionally surgery may help if a particular joint is severely inflamed by removing the inflamed lining called the *synovium*. In later stages it may be possible to replace a badly damaged joint with an artificial joint.

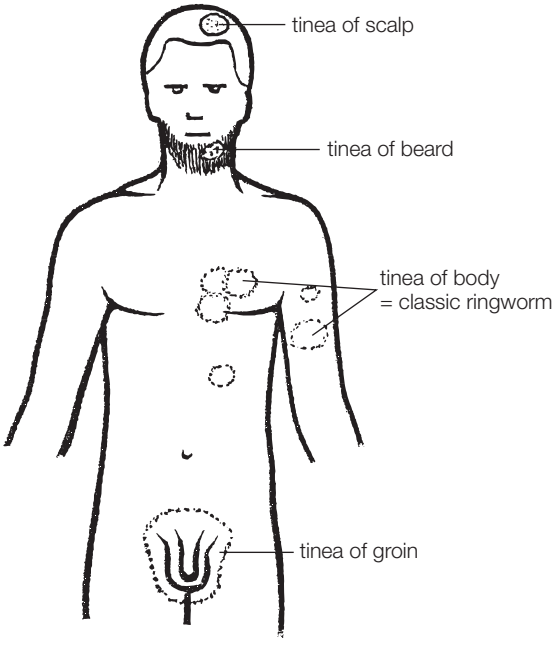
Support

Excellent leaflets and practical help are available from the Arthritis Foundation in each capital city. These include information about and access to a wide range of inexpensive equipment and tools that can assist your daily living.

Ringworm (tinea)

What is ringworm?

Ringworm which is also referred to as *tinea* is a fungus infection of the skin. It causes a superficial infection of the surface layer (*keratin*) of the skin resulting in scaly itchy patches. The classic ringworm, of course, is the well-known red ring that is usually seen on the trunk of the body, but it can take on forms other than the 'ring'. The fungi are referred to as *dermatophytes* and there are three main types that infect the skin of humans.



How is it transmitted?

The fungus is found almost everywhere and can be acquired from animals (*zoophilic*), from other humans (*anthropophilic*) and from the soil. In general, fungi transmitted from animals such as a pet cat or dog are more contagious and cause more severe inflammation of the skin. The guinea pig is a potent source of tinea of the face.

Person-to-person contact is a common mode of transmission. The fungi from infected people can contaminate objects such as towels, shoes, dressing-rooms or shower stalls, thus contact with these surfaces facilitates spread.

The risk is higher with:

- crowded living conditions
- day care centres or schools
- communal bathing areas
- close contact with animals

What are the various types of ringworm (tinea)?

Tinea of the scalp (tinea capitis): This causes patchy hair loss (bald patches) and scaling of the scalp. The hair may break at the surface of the scalp producing a black dot appearance. It is usually seen in children and can be difficult to clear up. It is caused by *Microsporum canis* typically acquired from dogs and cats.

Tinea of the body (tinea corporis): This is the classic ringworm we are familiar with that appears on the trunk and limbs. It starts on the trunk as a small, round, red patch which is scaly and itchy. The patch gradually grows until it is about 25 mm (1 inch) across; as it gets bigger the central area heals, leaving a red ring on the skin at the edge. After a week or two, other patches may appear nearby and sometimes can spread quickly.

Tinea of the groin (tinea cruris): Also known as Dhobie itch and jock itch, this is a common infection of the groin area of young men, usually athletes.

Tinea of the feet (tinea pedis): This is the common tinea in the skin between the toes with smelly macerated scaling. It can extend onto the soles of the feet.

Tinea of the nails (tinea unguium): This can affect both toenails and fingernails causing thickened, discoloured crumbly nails with crusting at the free edge.

Tinea of the beard (tinea barbae): This may cause an itchy boggy swelling called a *kerion*.

The diagnosis is made by taking skin, hair or nail scrapings and performing microscopic examination and culture.

What are the complications?

These include chronic nail infection with nail destruction, a pustular mass in hair called a kerion and secondary bacterial infection of the ringworm lesions such as cellulitis.

What is the treatment?

Treatment is usually with topical medications such as clotrimazole or terbinafine applied twice daily for 4 weeks. There are a number of other preparations that can eliminate milder cases of tinea. Discuss treatment with your doctor. For more severe infections such as tinea of the scalp, beard and nails, medication taken by mouth is usually essential.

Some rules of management

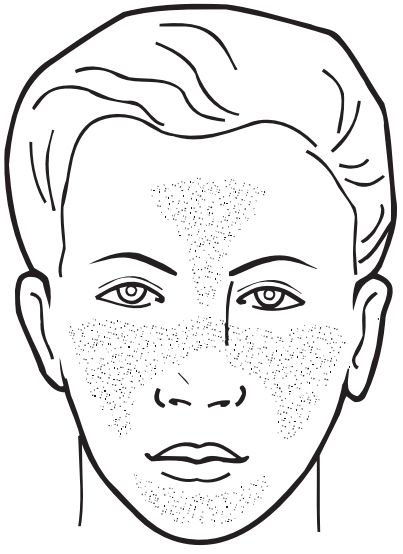
- Attend to personal body hygiene especially of the feet.
- Keep the skin dry.
- Have your pets with suspected ringworm checked by a veterinary surgeon (don't forget about guinea pigs).
- Keep a child with ringworm away from school until the condition clears.
- Keep infected hair and nails cut short.
- Infected people should not share headwear, towels, bed linen, combs or brushes.

Rosacea and perioral dermatitis

The commonest cause of a rash on the face is *acne*, typically in adolescents. Two other common causes of an embarrassing facial rash in adults are *rosacea* and *perioral dermatitis*.

What is rosacea?

Rosacea is an acne-like inflammation of the skin of the face, of unknown cause. It causes red flushing with small, red, raised bumps (*papules*) and, sometimes, pus-filled spots (*pustules*). It tends to come and go. It is referred to as 'the curse of the Celts'. The name is derived from the Latin, meaning 'like roses'.



Typical facial appearance of rosacea

Typical features

- involves the cheeks, nose, forehead and chin
- mainly occurs between 30 and 50 years of age
- more common in women
- the nose can enlarge, especially in men (rhinophyma)
- may be tender
- can affect the eyes

It is aggravated by:

- stress
- saunas and hot baths
- excessive sun exposure
- hot drinks
- hot and spicy foods that induce flushing
- alcohol to excess
- exercise
- corticosteroid creams, especially fluorinated ones

Treatment

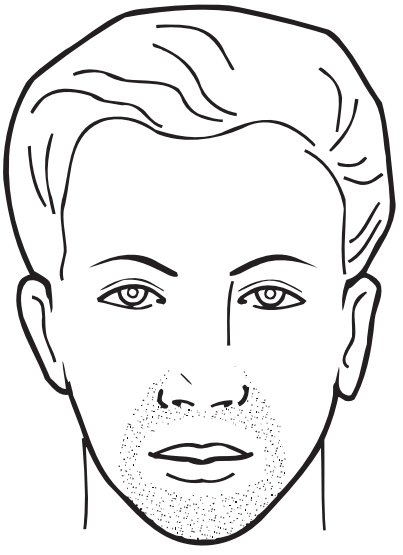
- Avoid or reduce aggravating factors.
- Avoid oil-based make-up.
- Your doctor may prescribe an ointment or gel.
- Take antibiotics by mouth for 8–10 weeks.
- Laser therapy may be used in some cases.

What is the risk?

- It is harmless but tends to recur.
- It may clear up spontaneously in time.
- Complications include eye infection and rhinophyma.
- The best treatment is oral antibiotics, e.g. tetracyclines, but rosacea is not an infection.

What is perioral dermatitis?

It is an acne-like, scaly dermatitis of the lower face and may be a type of seborrhoea. It also has redness, papules and maybe pustules. The cause is not clear but it seems to be related to rosacea. Flushing occurs commonly. It tends to come and go. It is not a serious condition.



Typical facial appearance of perioral dermatitis

Typical features

- involves the area around the lower nose and mouth and chin
- mainly affects young women

It is aggravated by:

- topical corticosteroids, especially fluorinated ones
- pregnancy
- oral contraception
- creamy cosmetic products

Treatment

- The best treatment is a course of antibiotics such as tetracyclines taken by mouth for 6 or 8 weeks.
- Sometimes topical ointments may be prescribed for mild cases.
- There is no special diet.
- Cease (slowly) all creamy preparations including cleansers, moisturisers and make-up.

Rubella (German measles)

What is rubella?

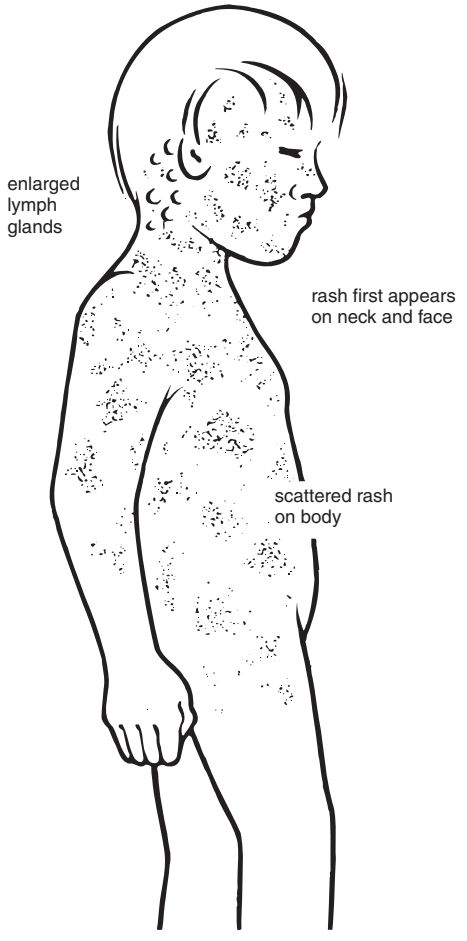
Rubella is an infectious disease caused by a virus called the *rubella virus*. It is also called *German measles*, because the disease was first described in Germany. It is usually a very mild illness and causes no more trouble than a common cold. However, it has very serious consequences for a woman who gets infected in the first 3 months of her pregnancy. Her baby may be born with blindness, deafness and an abnormal heart. This is called *congenital rubella*.

What are the symptoms?

The patient usually feels unwell, has a slight fever, possibly a runny nose, and swollen glands behind the ears and in the neck.

A rash appears on the first or second day and consists of reddish-pink spots that appear first on the face and neck and then spread rapidly to the body, especially to the chest. The rash lasts for about 2–3 days, and by the fourth or fifth day all symptoms have faded away.

It is possible to have picked up the rubella virus and have no obvious symptoms. This applies to about one-quarter of all patients, who fortunately become immune from further infection.



Typical symptoms of rubella

How is it spread?

The disease is moderately infectious and is spread by droplets from the nose and throat. Once inside the body, the virus has an incubation period of about 14–21 days before it starts to cause symptoms (if at all).

What are the risks?

The main risk is to an unborn baby. A more common complication, especially in adults, is stiff, swollen joints (arthritis), which is usually short lived. Rarely (1 case in 5000) it carries a risk of encephalitis (inflammation of the brain).

What is the treatment?

Because rubella is such a mild disease, there is no specific treatment. However, patients should rest quietly until they feel well and take paracetamol for fever or aching joints.

School exclusion

The child is usually excluded until fully recovered or for at least 5 days from the onset of the rash.

What should you do?

- Notify your doctor immediately if the patient has a convulsion.
- Notify school authorities.
- Contact any pregnant women who have been exposed to the patient.
- If visiting the doctor, telephone beforehand in order to avoid exposure to pregnant women in the waiting room (if you think rubella is the diagnosis).

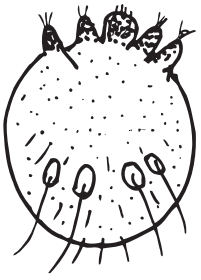
How can rubella be prevented?

The rubella vaccine should be given to all women before puberty. In Australia, it is routinely given to children at 12 months (combined with mumps and measles vaccines) and given again between the ages of 4 and 5. Older girls and women of child-bearing age who have not had rubella should be immunised at least 3 months before becoming pregnant. In Australia, most women aged 15–45 are immune and therefore protected from rubella. However, the only way to tell is to have a special blood test.

Scabies

What is scabies?

Scabies is a highly infectious skin infestation caused by a tiny mite called *Sarcoptes scabiei*. The mite, which is a type of arthropod, burrows just beneath the skin in order for the female to lay her eggs. She then dies. The eggs hatch into tiny mites, which spread out over the skin and live for about 30 days only. The mites cause an allergic rash.



The appearance of an adult scabies mite (actual size is 0.5 mm)

How is scabies spread?

The mites are spread from person to person through close personal contact (skin to skin), including sexual contact. They may also be spread through contact with infested clothes or bedding, although this is uncommon. Sometimes the whole family can get scabies. The spread is more likely with overcrowding and sexual promiscuity.

What are the symptoms?

- intense itching, causing scratching
- a red, lumpy rash

The itching is worse with warmth and at night. The scratching may cause sores and scabs. The allergy may result in eczema.

Where does it occur?

It usually occurs on the hands and wrists. Other common areas are the male genitals, buttocks, elbows, armpits, nipples in females, feet and ankles.

How is it diagnosed?

Scabies is diagnosed by its very itchy, lumpy rash. It is rare to find the tiny mites, but it may be possible to find them in the burrows, which look like small wavy lines. When dug out, they are examined under the microscope.

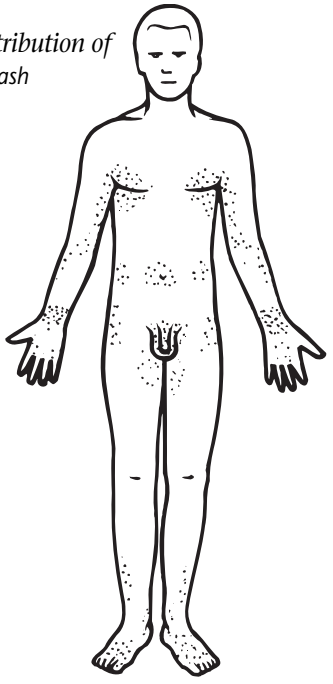
What is the treatment?

Topical medication

- *All ages* (*except children under 2 years*): permethrin 5% cream
- *Children under 2*: benzyl benzoate 25% solution but dilute in water (can be used for all ages)

  Lindane 1% lotion can be used as an alternative.

Typical distribution of the scabies rash



Where?

Apply to the entire body from the jawline down to the tip of the toes (even for genital scabies). Make sure you treat under the nails, in all the skin folds and the genitals.

How?

First have a warm shower or bath (not too hot). Use a clean washer and towel, and allow the skin to dry. Paint the lotion on all the skin thoroughly with a brush such as a shaving brush or paint brush. Do not rub your eyes or wash your hands. Put on clean clothes. Leave overnight for permethrin and for 24 hours for benzyl benzoate, then have a shower or bath.

How often?

One treatment is usually enough. It can be repeated in a week for a more severe infestation, but check with your doctor.

Clothing and bedding

Remove pillows and sheets, pyjamas and underwear after the second shower and wash them normally in hot water as a separate load. Hang the washing in the sun.

Note

- The whole family must be treated at the same time, even if they do not have the itch (one application is sufficient). Use separate towels and brushes.
- Itching can continue long after successful treatment; resist repeated treatments, but check with your doctor who will prescribe an antipruritic.
- Spray pillows, mattresses, chairs, car seats, prams and other soft articles with insect spray.

Schizophrenia

What is schizophrenia?

It is a disorder of the mind that results in disorganisation of normal thinking and feeling. Schizophrenia, which literally means 'split mind', is often thought of as a split or double personality (the 'Dr Jekyll and Mr Hyde' perception), but this is a false impression as there is no such thing. It is not an intellectual disability.

Schizophrenia can come in various forms with different symptoms and outcomes. The common type is described here.

What is the cause of schizophrenia?

The cause or causes are not yet fully understood, but we know that there is a malfunction or breakdown in some cells in the brain most likely due to a chemical imbalance or deficiency. This problem can be triggered by very stressful circumstances, illness, drugs (e.g. cannabis), major surgery and childbirth. It is not caused by family upbringing or other parental influences. However, there is a strong genetic factor involved—it can run in families.

What are the symptoms?

The 'attacks' may come on suddenly or, as is more usual, gradually with a withdrawal from daily activities and the onset of unusual or strange behaviour. The symptoms include:

- mixed-up thinking (called *thought disorder*)
- mixed-up feelings (feeling 'unreal')
- hallucinations, especially hearing imagined things
- delusions (a fixed wrong belief)
- lack of insight
- loss of energy and initiative
- inappropriate emotions
- withdrawal from social activities
- slow or unusual movements
- bizarre behaviour
- deterioration in work and study performance
- tension, anxiety or depression

The hallucinations are typically auditory, such as 'hearing' strange voices in the head or in the air. Visual hallucinations (seeing things) and tactile hallucinations (feeling things) are uncommon.

What does the onlooker notice?

The affected person appears to become withdrawn, vague, 'flat', unable to converse normally and logically, unable to answer questions normally (may be blank) and lacking in feeling.

His or her emotions will appear flat and inappropriate (such as laughing at something sad or serious and crying without cause). The person may start neglecting his or her personal appearance.

If the schizophrenia is severe, the person will seem very disturbed and irrational.

How does the sufferer feel?

The person feels confused, lonely and afraid. He or she may be aware of loss of control of thinking and behaviour. The person may feel that he or she is being controlled from outside and perhaps may feel under threat from people who actually love him or her. The person may feel great tension and anger.

How common is schizophrenia and who gets it?

About 1 person in 100 has it to some degree while about 4 in 1000 will be suffering from it at a given point in time. It is typically seen in young adults—most people develop it between the ages of 15 and 25. Men and women are equally susceptible. Anyone can develop it, but it does tend to run in families.

What are the risks?

The main risks occur during severe attacks, when sufferers can do physical harm to themselves and others. This applies especially to the older paranoid schizophrenic. They also may try to commit suicide.

What should relatives or friends do?

Medical care is vital for these people—if you suspect someone in your family has the problem, persuade him or her to visit the doctor, whom you should contact beforehand to explain your observations. The person can be most unco-operative and upset, but must not be left alone—medical help must be obtained. The person will have little or no insight into the problem and will often claim that there is nothing wrong. A lot of family support is needed.

What is the treatment?

Effective treatment is available in the form of major tranquillising drugs, psychotherapy and rehabilitation. Sometimes electroconvulsive therapy may be required. Once the problem is under control, the patient needs ongoing supervision. Support is available from various organisations. Ask about support groups.

What is the outlook?

Most people recover and lead normal lives but may require regular checks or constant medication. Times of extreme stress create risk of relapse. There are varying degrees of schizophrenia, from mild to severe. The mild cases usually 'bounce back' to normality, while the severe ones can have problems most of their lives, especially if unsupervised.

Sciatica

What is sciatica?

Sciatica is a type of *neuralgia* (nerve pain). The *sciatic nerve* is a huge nerve (about the size of an adult's small finger) that controls the function of the leg, especially the foot. It passes from the spine into the buttock, then into the back of the thigh and leg.

What causes sciatica?

It is caused by pressure, usually from a *prolapsed disc*, on the nerve roots from the lower back that form the sciatic nerve. This problem is often called a 'slipped disc', but it is not a good term because the disc is big and only part of it bulges to cause pressure.

Sciatica can be caused also by the nerve roots being trapped in the tunnel at the side of the spine through which they pass. This pinching effect causes the nerve to become irritated and swollen. The tunnel is made smaller by surrounding arthritis or a flattened disc space. This problem is quite common in elderly people.

A rare cause is a haemorrhage around the nerves in people who are taking blood-thinning tablets.

What are the symptoms?

The patient usually feels a burning pain or a deep aching pain in the buttock, the thigh, the calf and the outer border of the leg, ankle and foot. Sciatica is not a pain covering the whole leg like a stocking. It commonly causes a pain around the outer part of the leg into the ankle. The pain may vary from very severe to mild. A 'pins and needles' sensation or numbness may be felt in the lower leg and the foot.

The pain is usually made worse if you sneeze, cough, strain at the toilet or lift something.

What are the risks?

Fortunately most cases of sciatica gradually get better in about 6–12 weeks. Sometimes the pressure on the nerve is so great that the leg, especially the foot, becomes weak and floppy. In such cases, an operation is usually required to relieve the pressure.

Rarely a disc prolapse will cause severe weakness and numbness in the legs, and lack of control of the bladder or bowels. This is very serious and needs urgent attention.

What is the treatment?

Rest

When the pain is acute, it is important to rest lying down for 2 or 3 days if you cannot cope. Rest on a firm mattress or on the floor. However, try to keep as mobile as your pain will allow.

After the acute phase, you should try to return to normal activities. Avoid lifting, bending your back and sitting in soft chairs for long periods.

Medication

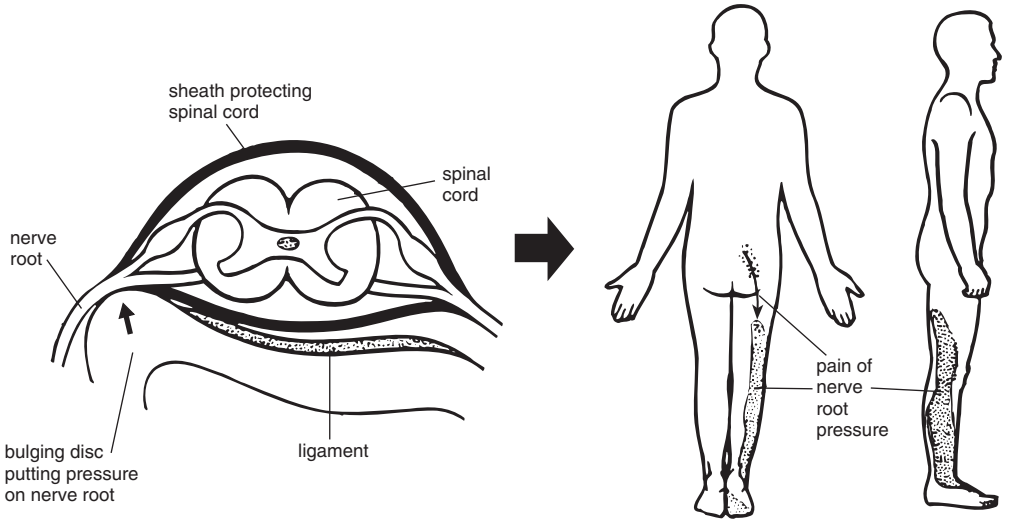
Your doctor will prescribe some tablets for your pain and perhaps some tablets to relieve inflammation around the nerve.

Exercises

These are very good if you can manage them, and swimming is one of the best. Your doctor will advise you.

Other treatments

Your doctor could advise traction, gentle stretching or mobilisation of your lower back or epidural injections to accelerate healing. Some people find electrical stimulation and acupuncture helpful.



Typical sciatic pain

Scoliosis

What is scoliosis?

Scoliosis (also called *idiopathic adolescent scoliosis*) is a lateral (sideways) curve of the spine. It usually develops during the growth spurt at 11–13 years.

How common is it and who gets it?

Scoliosis is common with a significant prevalence of 2–3% [above 10 degrees (10°)]; it is present to a minor degree in 10% of the population while 1 in 1000 have it to a severe degree. It is more common in females (a 10 to 1 ratio compared with males). Although some cases develop in abnormal spinal conditions or disorders such as polio, the cause is generally unknown (hence the term 'idiopathic'). It tends to run in families.

What are the symptoms?

The signs of idiopathic scoliosis can sneak up on people so that they are often not noticed. The problem does not appear until after 10 years of age in a previously normal spine. As the curvature develops, subtle changes may be noticed—shirts and trousers may fit poorly and hemlines of skirts are difficult to level. Back pain is uncommon in scoliosis but can occur in more severe cases.

What are the problems?

With major degrees of scoliosis you notice:

- obvious curving of the upper body
- shoulders become uneven and rounded
- one shoulder is higher than the other
- the shoulder blade on one side stands out

In extreme cases the lungs and heart can be compressed, leading to breathing difficulties. The worst feature for the patient is social embarrassment.

What are the diagnostic tests?

The screening test is the 'forward bend test' when the curvature and asymmetry (uneven sides) are obvious to the observer standing behind. This test is usually done with 12–14 year olds. An X-ray of the spine shows the S curvature and the Cobb angle is measured. This is the angle between the two main lines of direction of the curved spine.

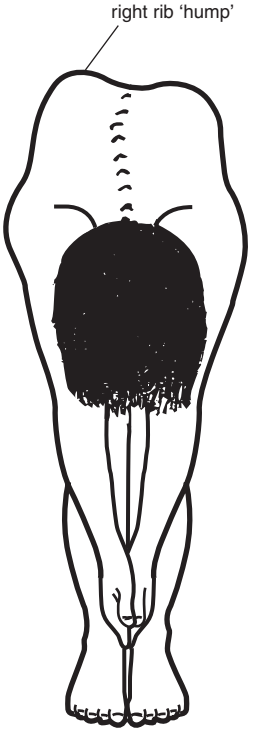
What is the management?

Most cases are minor (Cobb angle less than 10°), and simply practising good posture and having physiotherapy is all that is required. A brace can be used for those with a greater curvature; it will help to straighten the spine during the growing period of adolescence.

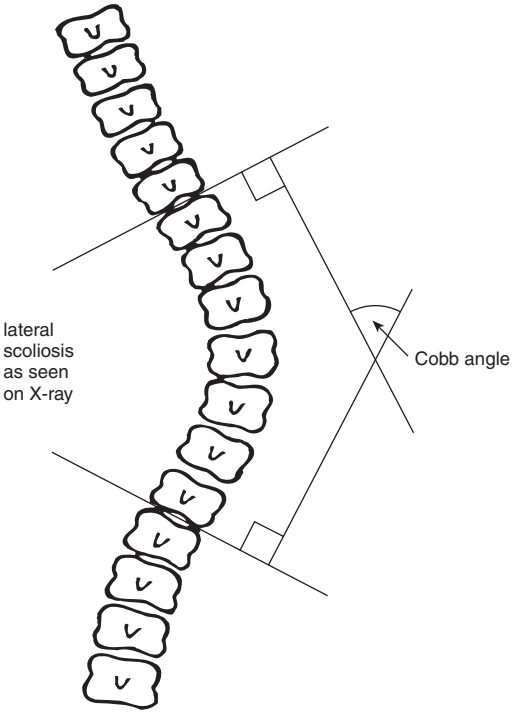
The general rules are:

- less than 20°—observe
- 20° to 40°—brace
- over 40° to 45°—operate

Patients with significant scoliosis will be referred to an orthopaedic surgeon for an opinion.



Positive forward bend test showing difference between right and left sides



Seborrhoea in infants

What is seborrhoea?

Seborrhoeic dermatitis is a common skin inflammation that occurs mainly in the hair-bearing areas of the body, especially the scalp and eyebrows. It can appear on the face, neck, armpits and groin. In particular, it can cause nappy rash. If it affects the scalp it is called 'cradle cap'.

What are the symptoms?

Seborrhoeic dermatitis usually appears as red patches or blotches with areas of scaling. This becomes redder when the baby cries or gets hot. Cradle cap may appear in the scalp. A flaky, scurf-like dandruff appears first, and then a yellow, greasy, scaly crust forms. This scurf is usually associated with reddening of the skin.

Unlike eczema, it does not usually itch and irritate the child, who is usually comfortable, in good health and does not scratch. However, the dermatitis can become infected, especially in the napkin area, and this becomes difficult to clear up. If untreated, it often spreads to many areas of the body. It is said that 'cradle cap and nappy rash may meet in the middle'.

At what age does it occur?

Seborrhoeic dermatitis tends to occur during the first year of life, especially during the first 3 months. Many cases begin in the first month of life. It is rare to see it begin after 2 years.

What is the treatment?

Self-help

Seborrhoeic dermatitis can heal naturally by following a few basic rules. It is most important to keep the areas clean and dry by bathing in warm water, patting the area dry with a soft cloth and keeping the skin exposed to the air and sun (moderate amounts) as much as possible. Avoid using soap for washing.

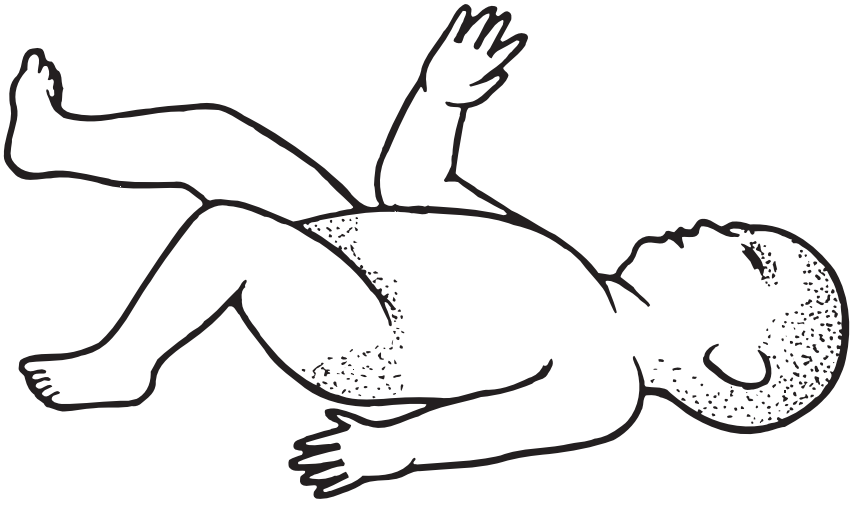
For cradle cap, rub the scales gently with baby oil and then wash away the loose scales.

For nappy rash, change wet or soiled nappies often, as soon as noticed. Keep the area dry and clean, exposing it to the air and sun for short periods several times a day. Do not wash in soap, use excessive powder or plastic pants.

For the body, apply a thin smear of zinc cream to help mild areas heal and to prevent spread.

Medical help

If the problem is not settling with basic care, consult your doctor, who may prescribe a cream containing sulphur or or salicylic acid, or a special stronger cream if necessary. A useful 'over the counter' preparation is Egozite cradle cap lotion.

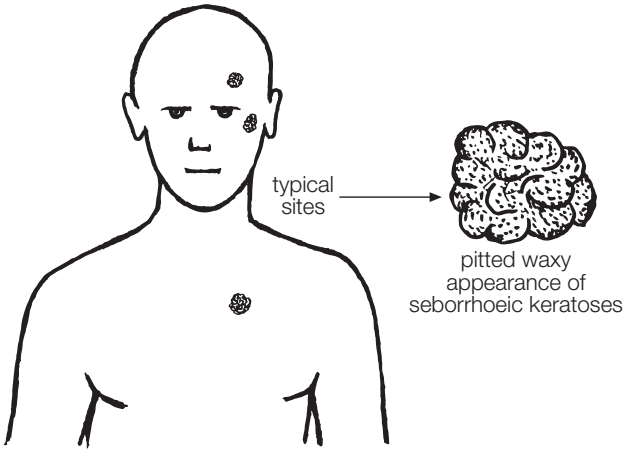


Typical distribution of the rash of seborrhoea

Seborrhoeic keratoses

What are seborrhoeic keratoses?

Seborrhoeic keratoses are harmless, brown, slightly raised growths that give the appearance that they are sitting loosely on the skin. They are one of the most common skin blemishes. Some people refer to them as 'delayed birthmarks' while others refer to them unkindly as 'barnacles of old age'. The cause is unknown. They are more common with advancing age and in those with a family history of these lumps.



Where are they located?

Although they can occur anywhere they are usually found on the face and trunk (chest and back). One type, which is a softish white lump, is commonly found on the legs of older people.

What are the features of seborrhoeic keratoses?

The raised lumps have the following characteristics:

- flat top with a well-defined border
- pitted surface
- maybe waxy or greasy crusty surface
- appear to sit on the skin
- round or oval but can be any shape
- colour varies from yellow to dark brown, occasionally black
- vary in size from a few millimetres up to 5 centimetres (2 inches) or even larger

Some can appear as though a dried sultana has been pressed onto the skin. Others can have a surface resembling a 'currant bun'. They may be solitary or, more commonly, multiple. The lumps are asymptomatic, that is, they do not itch or cause pain.

Who gets them?

Any adult can acquire them and both sexes are equally affected. They are age-related and increase in number and degree of darkness with advancing age. They are rare under 40 years of age and usually start to appear after 50 years when they are flat, light-coloured and inconspicuous. By the age of 60, almost everyone has a few seborrhoeic keratoses.

What happens to them?

They usually gradually get larger and darker and increase in number. Sometimes they are rejected by the body and fall off, leaving a pale area on the skin. However, most remain permanently.

What is the risk?

There is no risk. They are not contagious or infectious and they do not become malignant (cancerous). The very dark lumps can cause concern because they resemble a melanoma but your doctor can reassure you about this problem. Many people tend to scrape them with their fingernails. This habit is not recommended because they can become infected. They also invariably grow back.

What is the treatment?

There are no tablets or ointments that will cure or prevent these growths. As they are harmless their removal is not recommended and they can be safely left. However, ugly ones affecting a person's appearance and those that keep catching on clothing can be removed by various methods including surgical excision. Others, especially thin ones, can be shrunk or decoloured by applying liquid nitrogen or other strong chemicals carefully to the surface.

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Diarrhoea: acute diarrhoea in adults

What is diarrhoea?

Diarrhoea is the passage of many loose, watery, offensive bowel movements. It is a symptom, not a disease. It is usually associated with colic-type abdominal pain and sometimes vomiting. It invariably is a self-limiting problem.

What are gastroenteritis and enteritis?

Gastroenteritis means infection of the gastrointestinal tract from the stomach to the intestine. It causes both vomiting and diarrhoea and is very common in children.

'Gaster' is the Greek word for stomach or belly and *gastritis* means inflammation of the stomach. It causes vomiting.

'Enteron' is the Greek word for intestine and *enteritis* is inflammation of the intestine. It causes diarrhoea. Sometimes enteritis occurs in isolation without gastritis. A classic example is *typhoid* which is also called 'enteric fever'.

What causes it?

Diarrhoea usually is caused by a viral or a bacterial infection. Most episodes last for such a short time that a search for the cause is not necessary. However, if it lasts for 12 hours or longer, medical attention is needed. If it is associated with fever and the passage of blood and mucus it requires close attention.

Uncommon infections to be excluded are typhoid and food poisoning as well as parasite infestations with *Giardia lamblia* and amoebae. If you have diarrhoea on returning from overseas, it must be checked out. *Giardia lamblia* infection produces ongoing abdominal cramps, flatulence and bubbly foul-smelling diarrhoea. It is often misdiagnosed.

A common problem is *traveller's diarrhoea* which is usually caused by a bug from contamination by faeces in water supplies. It affects people whose stomachs are not immune to the germ. People can even acquire this problem in their own First World country.

Other possible causes are acute appendicitis, rich food, prunes, food allergy (e.g. dairy products), alcohol, emotional upset, prescribed drugs such as antibiotics and anti-arthritis agents, and excess vitamin C.

What is the treatment?

Rest

Your bowel needs a rest and so do you. It is best to reduce your normal activities until the diarrhoea has stopped.

Diet

It is vital that you starve but drink small amounts of clear fluids such as water, tea, diluted cordial and yeast extract (e.g. Marmite) until the diarrhoea settles. Then eat low-fat foods such as stewed apples, rice (boiled in water), soups, poultry, boiled potatoes, mashed vegetables, dry toast or bread, biscuits, most canned fruits, jam, honey, jelly, dried skim milk or condensed milk (reconstituted with water).

Avoid alcohol, coffee, strong tea, fatty foods, fried foods, spicy foods, raw vegetables, raw fruit (especially with hard skins), spicy Asian food, wholegrain cereals and cigarette smoking.

On the third day introduce dairy produce such as a small amount of milk in tea or coffee and a little butter or margarine on toast. Add also grilled lean meat and fish (either grilled or steamed).

Medication

Diarrhoea usually settles without the need for medicine. If it is socially embarrassing, kaolin-based preparations or intestine-slowing drugs such as loperamide (brand name Imodium) or Lomotil can be helpful.

Antibiotics should be avoided unless directed by your doctor.

Self-examination of breasts

Why examine your breasts?

- Regular breast self-examination (BSE) helps you become familiar with the usual feel of your breasts.
- You will detect any lumps in the breast at an early stage of their development.
- Although only 1 in 10 breast lumps is cancer, 1 in 15 women develops breast cancer at some time.
- Most breast cancers are found (as a lump) by the woman, not by the doctor.

Early detection of a lump—if it is a breast cancer—may mean a better chance of a cure.

By performing regular BSE, you are safeguarding your health.

What is the technique?

There are several BSE methods. No matter which you use, it is important that you examine your breasts regularly and that you cover the breast area completely.

The method outlined here is simple, easy to learn and provides good coverage of the entire breast.

When should it be done?

Breast examination should be done once a month a few days after the end of your period.

Position

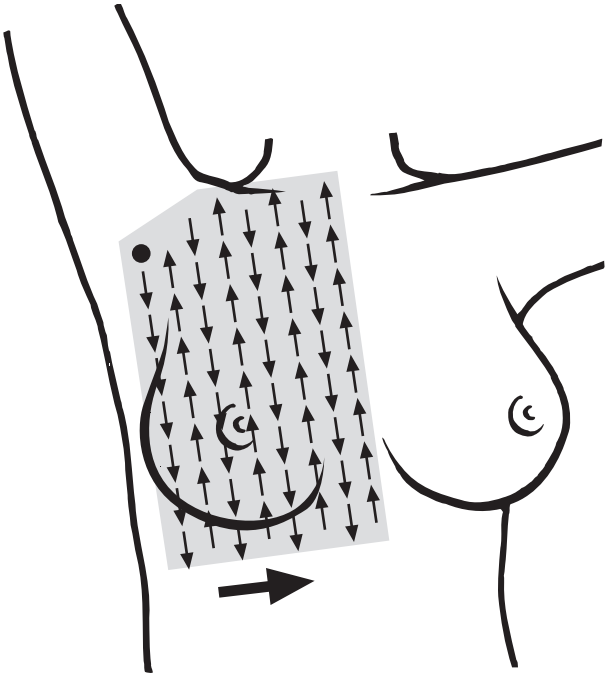
- The breast tissue must be spread as flat as possible.
- Lie on your back with one arm behind your head. The right breast is examined by the left hand and vice versa.
- Large-breasted women might need to modify this position. First lie on your side, then bring your shoulders flat onto the bed. Once you have examined as far as the nipple, lie flat on your back to examine the remainder of the breast.

Self-examination of breasts

Boundaries of the 'map'

Your examination must cover the breast tissue area completely. The boundaries are:

- the collarbone
- the brassiere line
- the breastbone
- a line vertical from the middle of the underarm



Examination

Vertical strips

Examine up and down the breast in vertical 'strips', beginning from the outer border. At the end of each strip, move the fingers about 2cm towards the breastbone and examine another vertical strip.

The flat of your fingers

Use the flat part of your fingers, including the fingertip pads, to feel the breast. Move your hand in *slow*, *circular* movements.

Light and firm pressure

At each spot feel first with *light pressure* (to detect any lump just below the surface), then with a *firm pressure* (to detect any lump near the ribs).

When finished, reverse the position to examine the other breast.

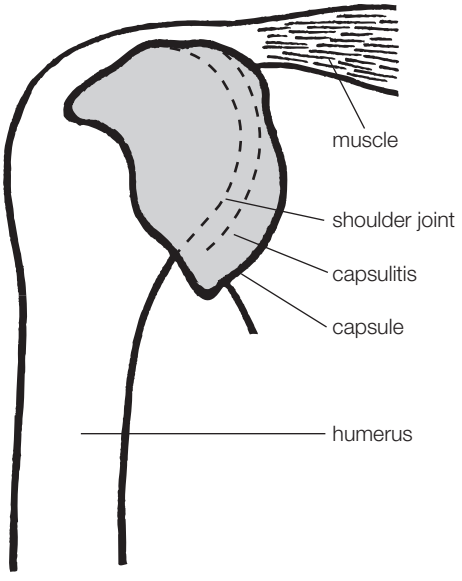
What should you do if you find a lump or thickening?

If you find a lump, dimpling of the skin, or a discharge, make sure you see your doctor as soon as possible. Please do not be afraid or put it off. Most changes are not cancer.

Shoulder: frozen shoulder

What is a frozen shoulder?

A *frozen shoulder* (also known by doctors as *adhesive capsulitis*) is when so much pain and stiffness develop in the shoulder joint that the affected person finds it difficult to move the shoulder freely. In some cases it is so severe that the shoulder cannot be moved, hence the term 'frozen'. It has nothing to do with temperature.



What is the cause and what happens?

The real cause is not known. What we do know is that inflammation develops within the shoulder joint and *adhesions* form. These are fibrous bands of tissue that look like cobwebs, develop within 10 days or so and occupy the joint space. The disorder can develop 'out of the blue' without a history of injury or overuse, but sometimes an injury such as a fall onto the shoulder may precede a frozen shoulder. It may follow a period of forced disuse such as after a stroke.

Who gets a frozen shoulder?

It can affect any person of any age but seems to be more common in middle-aged women and young athletes. It is commonly encountered in people with diabetes.

What are the symptoms?

The main symptom is pain and stiffness in the shoulder which are slight at first and then progressively get worse. The problem can be considered in 4 distinct stages:

Niggling: Pain, especially at night, but free movement.
Freezing: Continuing pain at rest, gradual loss of movement.
Frozen: Worse pain both day and night; pain on movement at end of range and with sudden movement.
Thawing: Gradual return of movement with less pain.

The pain is a deep, sickly, throbbing ache felt in the shoulder with radiation down the arms and possibly into the neck. It is aggravated by certain everyday movements such as dressing, undressing and combing the hair. The diagnosis is usually confirmed by ultrasound examination.

What is the outlook?

Unfortunately healing is very slow but a complete recovery can be expected even without treatment. This may take 2 years or longer but on average usually takes about 18 months. About one-third of people have some restriction of movement after 3 years but it does not affect their daily activity.

What is the treatment?

It is possible to do nothing except take analgesics for the pain and await recovery. This is a reasonable option especially in milder cases. Very strong analgesics will be necessary in those who have severe pain especially when it seriously affects sleeping.

Available treatments that can be effective include:

- cortisone injections into the joint
- cortisone tablets
- dilation of the joint with saline fluid
- surgery or arthroscopy to open the joint and free adhesions

Physical therapy, especially exercises under the supervision of a physiotherapist, assists recovery especially when the thawing stage commences. It is usually too painful to tolerate during the freezing and frozen stages.

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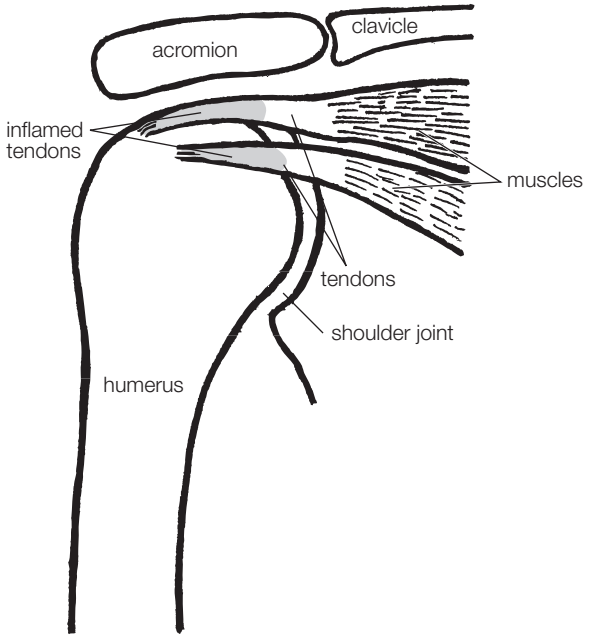
Shoulder: shoulder tendonitis

What is rotator cuff tendonitis of the shoulder?

Rotator cuff tendonitis, which is the most common cause of a painful shoulder, is inflammation with swelling of the three main tendons responsible for movement of the shoulder. These tendons, which arise from the scapula (shoulder blade) and grip the head of the humerus rather like the fingers of a hand, are known as the *rotator cuff tendons*. When activated they are responsible for rotating the upper arm in the shoulder socket and for raising the arm.



What is the cause of tendonitis?

The tendons work like pulleys in a very confined space and the constant friction of these cord-like structures under the bony arch of the shoulder (the acromion) results in wear and tear with inflammation. Swelling of the tendons causes problems with free movement and pain is the result. This catching under the bone is referred to as *impingement*. Excessive straining of the shoulder such as a sudden pull (for example by a dog on a lead), a fall on an outstretched hand or working under a car can trigger an acute episode. Sometimes calcification, which looks like white toothpaste, develops in the tendon and this makes it extremely painful.

Who gets rotator cuff tendonitis?

It can occur in all ages. Young people especially athletes who constantly use the shoulder are prone to get it. This particularly includes swimmers (freestyle and butterfly) and those playing sports requiring throwing and pitching such as baseballers, softballers and cricketers.

What are the symptoms?

Pain in the shoulder and upper arm is the main symptom. The severity of the pain can vary considerably from mild to very severe depending on the degree of inflammation and swelling. The pain is aggravated by movements such as dressing and undressing, toilet activity, brushing the hair or lying on the shoulder. Lifting the arm out from the side above the level of the shoulder is usually painful and affects sportspeople using overhead activity such as throwing, swimming and overhead shots in racquet sports. Ordinary X-rays of the shoulder are usually normal (except where calcification is present) but special ultrasound imaging will confirm the diagnosis.

What is the outlook?

Unfortunately recovery is very slow in more severe cases and can take as long as 1–2 years to settle but tendonitis invariably gets better naturally. It is possible to continue normal activities of living. In severe cases which are complicated by calcification of the tendon, bursitis or tearing of the tendon, recovery may be very slow.

What is the treatment?

Conservative measures are usually used for most cases. This involves avoiding aggravating activity as much as possible and applying cold or hot packs (whichever of them gives best relief). It is helpful to restrict movements of the arm to the pain-free range only. Massage with an analgesic ointment, cream or gel into the tender area may help. For more painful problems an injection of corticosteroid with local anaesthetic can give great relief. It is advisable to have the help of a physiotherapist to supervise exercises to strengthen the rotator cuff muscles and stabilise the shoulder joint. Sometimes surgery of the shoulder to decompress the tight space between the bones may be necessary to obtain relief.

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Skin cancer

Skin cancer is usually found in fair-skinned people who are exposed to too much sun.

What are the main types of skin cancer?

Basal cell carcinoma

- the commonest and least dangerous type
- usually appears on the face and neck
- is easily treated
- most common over 50 years of age

Squamous cell carcinoma

- is quite dangerous
- appears on hands, forearms, face and neck
- common on lower lip, ear and scalp in men with thin or no hair
- can spread to other parts if left untreated too long
- most common over 60 years of age
- more common in men with outdoor occupations

Melanoma

- the rarest and most dangerous type
- usually starts in a mole
- only a few moles become melanoma
- can occur anywhere on the body
- most common between 30 and 50 years of age

What are the signs of skin cancer?

- crusty non-healing sores or 'sunspots'
- a persistent small lump or spot that is red, pale or pearly in colour
- a new spot, freckle or mole that has changed colour, thickness or shape over months

- Dark spots (dark brown, black or blue-black) need special attention.

What are the causes?

The main cause is exposure to the harmful ultraviolet rays of the sun over a long time. Exposure to some chemicals, such as arsenic and polycyclic hydrocarbons, can cause skin cancer.

What are the areas to watch?

Watch your face, ears, neck, shoulders, arms and the backs of your hands. However, melanoma is an exception and can appear anywhere on the body.

Who is at risk?

Older people are at risk, as the risk of skin cancer increases with increasing age. Fair-skinned people living in hot, sunny climates are most at risk. People with freckles, several dark moles and fair skin are especially at risk. It is most common in people of Celtic (Scottish, Irish and Welsh) background. It is not as common in people with very dark skin (of African, Indian and Asian origin). It is rare in Australian Aborigines.

The darker the skin, the lower the risk of developing skin cancer. Those with fair, sensitive skin who burn easily and rarely tan are at greatest risk.

Sunspots (*solar keratoses*) are dry, rough, persisting spots on the skin, which can change into skin cancer and need to be watched.

How is it prevented?

Protect yourself from the sun:

- Try to avoid direct sunlight when the sun is strongest (from 10 am to 2 pm standard time, i.e. from 11 am to 3 pm daylight-saving time).
- Always wear a broad-brimmed hat, T-shirt and baggy shorts when in the sun.
- Be wary of reflected sun on cloudy days and wind that dries the skin.
- Use a SPF factor 15 or more sunscreen on exposed skin and renew it regularly.
- Make sure you protect yourself at high altitudes.
- Wear a shirt or dress with sleeves.
- Avoid sunburn.
- Protect children from sunburn. Their skin is more sensitive than adults' skin to sunlight.

Early detection

The earlier you detect skin cancer, the simpler the treatment. The outlook for most skin cancers is excellent.

Remember

You are the best person to check your skin—no one knows it as well as you.

What should be done?

Go to your doctor without delay if you develop a skin lump. The doctor may want to remove part or all of it for examination in the laboratory.

Sleep problems

How much sleep do we need?

Many people are not aware that the amount of sleep we need for normal health varies with our age. Also, adults are different in the amount of sleep they need; for some, 4 hours a night is ample; for others, 10 hours is not enough. The average sleep for a 50-year-old is 7 hours a day.

What is a sleep problem?

There is a problem when lack of sleep or too much sleep interferes with your activities during the day. The commonest cause is *insomnia*, which may be caused by anxiety or depression. There are other problems that can interfere with sleep, including problems of your bed mate. These problems include restless legs, sleep apnoea (brief periods of not breathing) and snoring.

What is insomnia?

Insomnia is a lack of adequate sleep, which may be difficulty getting off to sleep, difficulty staying asleep, or waking early. It is a temporary problem in most instances and is usually due to a passing personal problem; however, sometimes it just happens for no reason.

What can I do to settle to sleep?

If you have difficulty going to sleep, the following guidelines might be useful:

- Do not try too hard in attempting to go to sleep.
- Establish a routine to follow before going to bed.
- Go to bed to sleep (not to read, eat or watch television).
- Only lie down to go to sleep when you feel sleepy.
- Try to settle down before going to bed. Do not try to sleep immediately after a heavy meal, after difficult work that required a lot of concentration, after strenuous exercise or after an emotional upset or argument.
- Try to recognise what helps you settle best. The following are useful to some people: glancing through a magazine, listening to the radio, having a warm (not too hot) bath or shower, or some other relaxation technique. You might find something else that works better for you.
- Often, having a warm milk drink as you retire to bed will help.
- Many people find that drinks containing caffeine (such as tea, coffee and cocoa) make it difficult to go to sleep.
- Alcohol can stop many people from settling to sleep and can cause others to have disturbed sleep.
- Decide the hours during which you want to sleep and try to sleep only within that period. Repeated 'naps' during the day will make sleep at night difficult.
- In general, you will come to no harm if you do not sleep at all for one or two nights; you will catch up later.
- Find a settling-down routine that works best for you. Even if it seems only partly effective, the fact that you have a routine will eventually assist your sleep.
- Undertake a relaxation program such as meditation. Don't take your worries to bed.

What about sleeping tablets?

Doctors prefer you to work at getting a natural sleep by the various relaxation techniques and not take hypnotic drugs. However, sometimes drugs can help you over a difficult period and may help you get into a pattern.

Some hypnotic drugs are suitable, but should be taken for a short time (say 2–3 nights) and taken in the lowest effective dose. Most people seem to make a prescription of 25 tablets last for 3–6 months, and this is sensible.

Rarely, some people with chronic insomnia manage best with regular use of sleeping tablets and cannot manage without them. In such instances, long-term use of sleeping tablets may be justified.

A special tip

Special sleep disorder units to help your problem are present in most major cities. Ask your doctor about them.

Smear test

What is a smear test?

The *smear test*, also called a *Pap test* (Papanicolaou test), is a simple test that scrapes cells off the surface of your cervix for examination in a laboratory.

Why have it?

It can detect early warning signs of cancer of the cervix (cancer of the neck of the womb). This is one of the most curable forms of cancer if detected early; hardly any women would die from it if all had regular smears as recommended by the medical profession. The early changes in the cells cause no symptoms, and so women in early stages of cervical cancer feel quite healthy.

Who should have it?

Any woman over 15 years of age who has had sex should have a smear test, and it should be performed every 2 years up to the age of 70. Even women who have stopped having periods or stopped having sex should have regular smear tests.

When is the ideal time to have a smear?

The best time to have a smear is any time after your period has finished. It should not be done if you have been douching or using vaginal tablets in the previous 24 hours.

How is the Pap smear done?

It is part of a normal pelvic or vaginal examination.

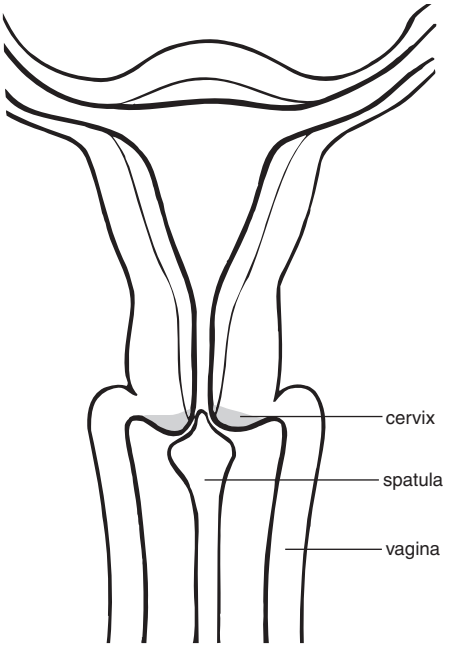
1. You lie on your back or your side on the couch.
2. An instrument called a *speculum* is slid gently into your vagina and then opened so that the doctor can see the cervix clearly, with the help of a light.
3. The smear is then taken with a thin spatula and a soft brush. It is really a very thin amount of mucus with cells that sit on the surface and the small opening of the cervix. The smear is then placed on a glass slide, which is sent away to be tested.

Does the smear test hurt or take long?

It is a simple test that does not take long (only about 2–3 minutes) and should not hurt. If you are tense, it may feel a little uncomfortable but will not cause any pain. The more relaxed you are the better. Deep breathing will help you relax.

Will I feel embarrassed?

It is quite normal to feel a little embarrassed. Doctors, of course, are used to doing them and perform many each day, so they understand. Nobody has ever died of embarrassment,



but many have died of cancer of the cervix by not having a smear test.

What about the results?

The results take about 1–2 weeks. Ask your doctor when you should ring for the results. The results are almost always normal. Abnormal cells are seen in only about 3 in 1000 smears and do not always mean cancer. The microscopic findings are not infallible, unfortunately, but are improving all the time and are almost 100% accurate. If there is any doubt, you will be recalled for a repeat test. For most women who have abnormal cells, the treatment is simple and effective.

What are the new methods?

These are the Thin Prep and Papnet methods of studying the cells from the Pap smear which is done in the usual way. They appear to be better at picking up abnormal cells in doubtful cases but cost more. However, the standard smear remains highly effective for screening.

Key points

- The smear test is simple, quick and painless.
- It should be done every 2 years.
- It should be done throughout life from the start of sexual activity up to 70 years.
- The smear test allows your doctor to prevent cancer of the cervix.
- Cancer of the cervix is curable if detected early.
- The smear test is your safeguard.

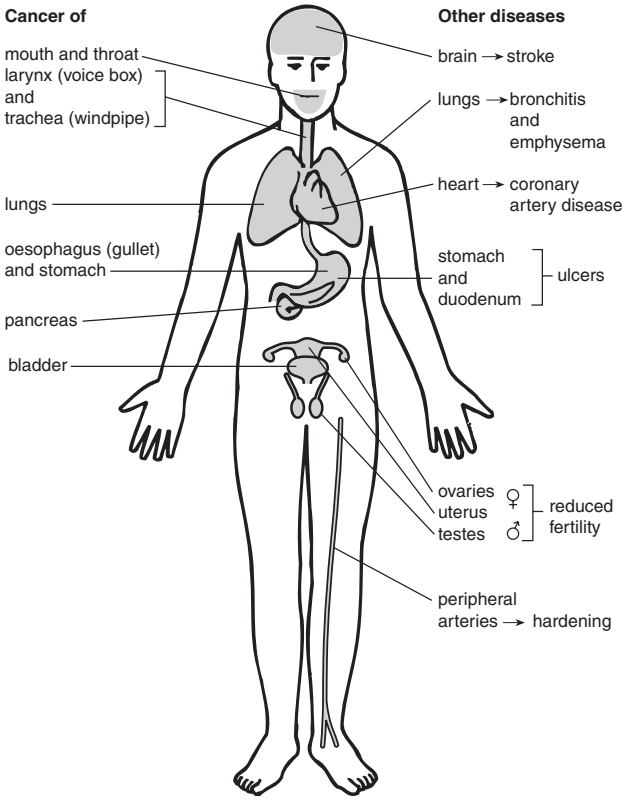
Smoking—quitting

What are the facts on smoking?

Each year over 20 000 Australians die from diseases caused by smoking. Out of every 5 people who smoke 20 or more cigarettes a day, 2 die before the age of 65.

- *Cancer*: Smoking is the major cause of death from cancer, especially lung cancer (86% caused by smoking).
- *Other lung disease*: Smoking causes chronic bronchitis (smoker's cough) and emphysema.
- *Hardening of the arteries*: Smoking can cause hardening of the arteries of the heart (angina and coronary attacks), brain (strokes) and legs.

Women smokers have problems with pregnancy (including smaller babies), increased chance of infertility, an earlier menopause and an increased risk of osteoporosis.



Harmful effects of smoking

What is in a cigarette?

The most harmful chemicals in cigarettes are tar, nicotine and carbon monoxide. Nicotine causes the addictive effect.

How will it help me if I quit?

The risk of death from heart attacks, lung cancer and other lung diseases will drop dramatically. Many of the bad effects of smoking can be reversed after quitting. Other reported good effects are increased 'wind' on exercise, better senses of taste and smell, improved sexual pleasure and much more pocket-money. It is unnatural to smoke.

How should I quit?

The best way is to stop completely, going 'cold turkey'. It may help to use nicotine gum or skin patches, because nicotine is very addictive. Changing to pipes or cigars is not as good as completely stopping. Gradual reduction (e.g. by 3 or 4 a day) is a reasonable method, but it is best if you can stop completely within 2 weeks.

What are the unpleasant effects of quitting?

For the first few days it is normal to have the withdrawal effects of feeling restless, irritable, tense, tired and sweaty. You will crave for a cigarette, but these feelings are signs of recovery from the addictive effects of nicotine as your body adjusts itself for a return to normal health. After about 10 days, most of these uncomfortable feelings will have disappeared and you will start feeling absolutely marvellous. Ask a smoker who has quit.

What are some good tips for quitting?

- Make a definite date to stop (e.g. during a holiday).

After quitting:

- Eat more fruit and vegetables (e.g. munch carrots, celery and dried fruit).
- Foods such as citrus fruit can reduce cravings.
- Chew low-calorie gum and suck lozenges.
- Increase your activity (e.g. take regular walks instead of watching TV).
- Avoid smoking situations and seek the company of non-smokers.
- Drink more water and avoid substituting alcohol for cigarettes.
- Be single-minded about not smoking—be determined and strong.
- Take up hobbies that make you forget smoking (e.g. water sports).
- Put aside the money you save and have a special treat. You deserve it!

Where can I get more help?

There are many quitting programs and community groups to help smokers. Many excellent tapes and booklets are also available. Chewing nicotine gum, using nicotine skin patches or inhaling nicotine like asthma inhalations can help. However, these are only temporary measures and are generally not used for longer than 6 months.

A final word!

Ask your general practitioner for help ASAP. Do not put it off—ask for help now. It is unnatural to keep smoking. Choose the good, healthy life.

Snoring

What is snoring?

It is sonorous sound with breathing during sleep, caused by vibrations in the upper airways from the nose to the back of the throat. It is caused by partially obstructed breathing during sleep.

What are the facts?

Snoring is extremely common and only rarely indicates obstructive sleep apnoea (slowing or stopping of breathing for short periods while sleeping). It is three times more common in obese persons and increases as we get older.

It varies from being an annoyance to others (the snorer is usually oblivious to the problem) to indicating obstructive sleep apnoea.

What makes snoring worse?

- obesity
- old age
- sleeping on the back
- excess alcohol
- neck problems, especially a 'thick', inflexible neck
- various drugs, especially sedatives and sleeping pills
- hay fever and other causes of nasal congestion
- problems in the upper airways such as nasal polyps, enlarged tonsils or a foreign body, e.g. a piece of plastic or metal

What are the risks?

Snoring is generally a harmless problem but if it is very severe, unusual or associated with regulated periods of no breathing (usually longer than 10 seconds) then it is advisable to have it assessed in a special sleep laboratory. It may indicate obstructive sleep apnoea.

The social risks are a major problem as it can lead to a breakdown of relationships, to varying degrees. Heavy snorers should have a thorough examination of the upper airways (nose to throat) and of the neck.

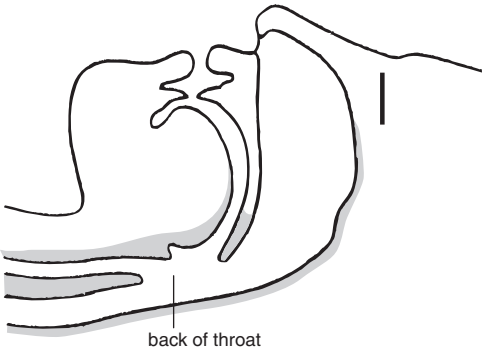
What is the treatment?

If an examination rules out a physical problem causing obstruction in the back of the nose and obstructive sleep apnoea, then the following simple measures can be tried:

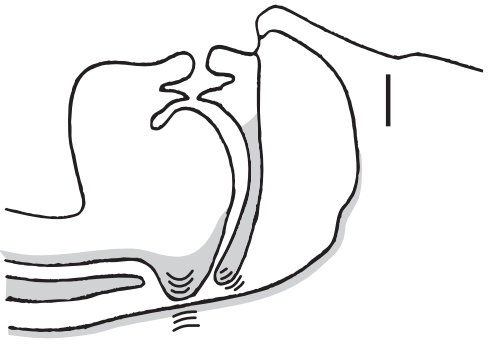
- Obtain and keep to ideal weight. Overweight people could attend a Weight Watchers organisation and take regular exercise.
- Avoid drugs (including sedatives and sleeping tablets), alcohol in excess and smoking.
- Treat nasal congestion (including hay fever) but avoid the overuse of nasal decongestants.
- For neck problems, keep the neck extended at night by wearing a soft collar.
- Consider a trial of an intranasal device such as the Breathing Wonder which is a hollow intranasal plastic insert. Your pharmacist can advise you about the range of such devices.
- Try to sleep on your side. If you tend to roll onto your back at night, a maverick method is to consider sewing ping pong balls or tennis balls on the back of the nightwear. Others wear a bra (with tennis balls) back to front.
- Special surgical procedures may solve the problem for some people with very severe snoring. Others may be helped with special machines that deliver continuous positive airway pressure (CPAP) through a face mask.

Special anti-snoring pillows have not proved to be any better than regular pillows or raising the head of the bed.

When all else fails, provide those affected in the household with ear plugs.



Normal airway when lying down to sleep



Vibrations of soft palate and tongue in snoring

Snuffling infant

What is the cause of snuffling?

Snuffling is usually caused by a viral infection that infects the upper respiratory tract (airways), particularly the nose. This is called *rhinitis*, which is a common minor infection in adults but in children it causes considerable discomfort because the nasal passages are so small. The infection makes it difficult to breathe through the nose. The virus is usually one that causes the common cold.

The so-called upper respiratory tract infection (URTI) is very common in infants from the age of 4–6 months upwards, although infection can occur earlier if children are exposed to the viruses. The average child can expect to get up to six episodes each year.

What are the symptoms?

- nose blockage with yellow or green mucus
- coughing
- irritability with crying
- feeding difficulty caused by the nose blockage

What are the risks?

It is usually not a serious problem and appears worse than it actually is, although you may not think so at the moment. Sometimes infection with bacteria can develop, and so you should contact your doctor if there is:

- loss of activity
- swelling and infection of the eye
- wheezing or other breathing difficulty
- neck stiffness
- an unusually high fever
- other unusual symptoms

A robust crying child is not as big a cause for concern as is a whimpering, pale, inactive child.

What is the treatment?

Since the problem is caused by a virus, antibiotics do not cure it and so they are not prescribed unless a bacterial infection such as a middle ear infection complicates the problem. Your doctor will be able to check your child's ears, throat and chest to discover any such infections.

Pain-killers

To ease your child's discomfort when he or she seems uncomfortable or distressed, give paracetamol mixture or drops according to the recommended age dosage.

Clean the blocked nose

Cleaning the infected mucus from the nose is quite an easy task for parents. Make a salt solution by mixing a teaspoon of salt with 500 mL of boiled water. Using a cotton bud dipped in the warm saline, gently clear out the secretions from the nose about every 2 waking hours. Another trick is to use a firm 'spear' made out of tissue paper to get to the side of the mucus and then hook it out. Ask your doctor about the 'spears'.

Nose drops

When the nose has been cleaned instil saline nose drops or spray (e.g. Narium nasal mist). An alternative is a paediatric decongestant nose drop or spray preparation (such as Vasylox Junior or Otrivin) if the saline drops are not effective and if there is a problem with feeding. These stronger drops should only be used for 4–5 days.

Spondylosis

What is spondylosis?

Spondylosis is a condition of the spine in which it is hardened and stiffened by osteoarthritis. It is also referred to as *degenerative disease of the spine*. The two areas commonly affected are the neck (*cervical spondylosis*) and the lower back (*lumbar spondylosis*).

What causes it?

Constant wear and tear and injury to the joints of the spine cause arthritis in the joints. The discs, which are like soft rubber shock absorbers between the vertebrae, become hard and stiff as they shrink with age. This causes strains on all the surrounding joints and tissues, leading to stiffness. It is common in people who have worked hard with their backs (such as labourers and farmers) and those who have had injuries (such as in car accidents). The older one gets, the more likely one is to get spondylosis.

What are the symptoms?

Many milder cases cause no symptoms. The common symptoms are stiffness and tenderness in the neck or lower back, especially first thing in the morning or after activity such as gardening or painting.

Cervical spondylosis

This can cause a painful neck with headache and aches and pains in the surrounding areas. The neck feels very stiff, which makes it hard to turn around (while reversing the car, for example). The head can feel like a heavy cannonball.

Lumbar spondylosis

Common symptoms are stiffness and pain in the lower back with poor movements (such as difficulty in bending forwards). Shooting pains in the buttocks and legs resulting in sciatica are common. There may be pain in the back of the legs after a long walk. This uncommon problem is caused by narrowing of the space inside the spine from overgrowth of the bones due to arthritis and may require an operation.

What is the treatment?

It is important to keep active, but do not overdo the activity. A sensible balance between mild to moderate exercise and rest is necessary, but it has to be 'played by ear' as each individual is different. You should be able to live comfortably with spondylosis with exercise, following your physiotherapist's advice and taking medication. It is usual for the discomfort to improve with time, although the stiffness remains.

Exercise

Regular gentle exercise for your neck or lower back will help you. You will be advised by your doctor or physiotherapist about the best exercises for you, but gentle, slow stretching exercises to as far as you can stretch are recommended. Swimming or hydrotherapy will help overcome the stiffness.

Medication

Regular use of mild pain-killers such as aspirin or paracetamol (recommended) will relieve your aches and pains. Your doctor may prescribe a course of anti-inflammatory drugs which should be used in moderation.

Diet

There is no proven special diet although some people find that reduction of dairy products may help. It is advisable to follow a healthy low-fat, complex carbohydrate diet with the aim being to keep to ideal weight. Being overweight aggravates spondylosis.

Sports injuries—first aid

Muscle strains

You can 'pull' (strain or tear) a muscle if you do not warm up properly before exercising or if you have not done enough preseason training.

Management of a pulled muscle is based on 'RICE':

***R**est*	No exercise, no stretching; rest the injured soft tissue of the muscle.
***I**ce*	Apply an icepack for 20–30 minutes every 2 hours while awake during the first 48 hours.
Compression	Keep the muscle firmly bandaged for at least 48 hours.
***E**levation*	Rest the leg on a stool or chair (or the arm on cushions or in a sling) until the swelling goes.

- If the injury is severe, see a doctor immediately.
- After resting the muscle for a few days, stretching can begin. Warm the area first with an infra-red lamp or a hot-water bottle. Then stretch your leg or arm about 5 times to contract the muscle gently. Do this twice each day for 14 days.
- Do not return to sport until the pain and swelling have gone, the muscle is strong and you can move the limb freely without discomfort.

> **Note**
>
> Reusable soft-fabric cold compresses that can be stored in a freezer (at least 2 hours) and dual-purpose hot/cold packs are available and are ideal for the athlete to have always available.

Torn leg muscles

For a damaged hamstring or other leg muscle, begin the stretching by lying on your back with the knee straight. Lift the leg to a level where it just starts to hurt and hold the position for about 30 seconds. Do this twice a day for about 14 days.

Then start more vigorous stretching. Strap a 1.5 kg weight to your ankle, lie on your stomach and lift your foot (bending the knee) so that your heel almost touches your buttock. Repeat 5–10 times. Stop if it causes pain; otherwise do this exercise 2 or 3 times a day for 2 or 3 weeks, increasing the weight gradually to 5 kg.

Keep yourself fit with swimming while the muscle is recovering.

Joint sprains

One of the commonest injuries in sport is a joint sprain: stress on the joint stretches its lining or ligaments (or both) beyond normal limits. Most often, damage occurs to the knee, ankle and wrist joints, making them swollen, tender and painful to move. Bruising is not always obvious. Again, first aid is based on 'RICE':

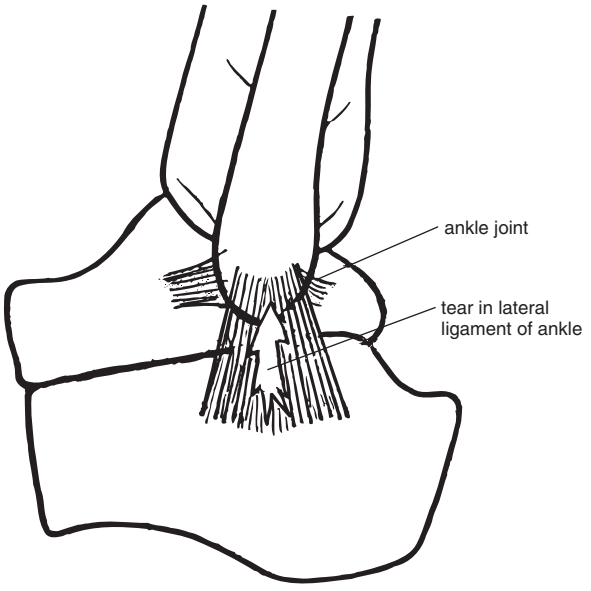
***R**est*	Rest helps prevent the injured area from moving, reducing pain and speeding healing. Use crutches to take the weight off injured joints in the leg.
***I**ce*	Cold will reduce swelling, pain and stiffness. Use a reusable compress or a packet of frozen peas or beans or wrap ice cubes in a damp tea-towel (or a thin bath towel); never apply ice directly to the skin. Use the icepack for about 20 minutes every 3 hours for the first 48 hours.
Compression	Compress and support the injury with a firm (not tight) elastic wrap bandage.
***E**levation*	Elevate the leg on a stool or chair (leg, knee and ankle injuries) or put your arm in a sling (shoulder, arm and wrist injuries) until the swelling goes.

Most minor joint and muscle injuries settle quickly with this treatment. If not, or if the injury was severe, professional assessment and treatment are necessary.

Sprained ankle

What is a sprained ankle?

A *sprain* occurs when there is damage to the ligaments that bind the bones of the ankle joint. The fibres of the ligament that has been overstretched tear and then bleed. The tear is usually minor, involving a small number of fibres, but sometimes the ligament can be completely torn.



Sprained ankle

What is the cause?

The cause is a sudden twist of the foot inwards so that the ligaments on the outside of the ankle are overstretched, rather like tearing an overstretched piece of material. Sometimes the inside of the ankle is sprained when the foot twists outwards.

What are the symptoms?

The symptoms depend on the extent of the damage. Pain, swelling, bruising and tenderness of the injured area usually occur and vary from mild to severe. With a complete tear the ankle joint will go out of shape and feel unstable.

How common is the problem?

Sprained ankles are very common. In an average year, at least 1 person in 50 consults a doctor about this injury.

What is the treatment?

For a mild sprain, self-help measures are usually sufficient. However, a severe sprain requires an X-ray, since there may be a fracture or a complete tear. Sometimes the discomfort of a sprain settles quickly, but should it persist beyond 3–4 days a visit to your doctor is advisable. Your doctor may apply a special strapping.

Self-help

This includes following the 'RICE' formula:

***R**est*	Rest as much as possible. If the sprain is severe, use crutches to take the weight off the ankle.
***I**ce*	Apply icepacks and/or soak the ankle in cold water to reduce swelling and pain. Use a special reusable compress (e.g. ACE wrap) or a packet of frozen peas or beans or wrap ice cubes in a damp tea-towel; never apply ice directly to the skin. Use the icepack for about 20–30 minutes every 3 hours when awake for the first 48 hours. (Icepacks can be placed over a bandage.)
***C**ompression*	Compress and support the ankle with a firm (not tight) elastic bandage.
***E**levation*	Elevate the leg on a stool or chair until the swelling goes.

Exercise program

Exercises started early will help prevent permanent stiffness. Exercise every hour up to the point of discomfort. Do each exercise at least 10 times.

1. Firmly flap your foot up and down at the ankle joint.
2. Rotate your foot inwards and outwards, keeping the foot at right angles to the leg.
3. Combine these exercises so that your foot moves slowly in a circle (clockwise, then anticlockwise).

Pain-killers

Take analgesics for pain, especially at night. Paracetamol with or without codeine is usually sufficient.

Walking

Walking with your ankle supported in comfortable walking shoes is recommended for short distances. Walk as normally as possible, but avoid standing still for long periods. Walking without shoes in sand is an excellent way of strengthening your ankle quickly (after the first 2–3 days).

What is the outcome?

For most sprains you can expect full recovery in 1–6 weeks, but severe sprains with complete tearing take longer, as a plaster cast for 4–6 weeks or surgery may be necessary.

Squint and loss of vision

What is squint (strabismus)?

Squint or *strabismus* is a 'turned eye' due to lack of co-ordination of the 6 muscles of each eye that control the focusing between the eyes. The two eyes therefore do not focus on the same object: one will focus on the intended object but the other looks somewhere else—usually inwards ('cross-eyes'), sometimes outwards ('walleye'), or even upwards or downwards.

When does it become obvious?

A squint is rarely obvious in the first weeks of life but tends to show up when the baby learns to use the eyes, from about 2 weeks to 3 or 4 months of age. However, it may appear later, even as an adult. Vision which is present at birth continues to develop until 7–8 years of age.

What are the main types of squint?

Constant or true squint is one that is permanent—always present.

Latent squint is one that only appears under stressful conditions such as fatigue.

Transient squint is one that is noticeable for short periods and then seems normal.

Alternating squint is one that changes between the eyes so the child can use either eye to fix vision.

Pseudo squint is not a true squint but only appears to be one because of the shape of the eyelids.

A good way to pick a true squint from a pseudo squint is to observe the position of the light in the eyes when a torch is shined into them. This light reflex will be in exactly the same position in both eyes in the pseudo squint but in different spots with the true squint.

The two serious squints are the *constant* and *alternating* ones, which require early referral.

What are the risks?

If a true squint is not corrected before the age of 6, there is a danger that the 'lazy eye' will gradually lose vision from lack of use. This condition is called *amblyopia*. The golden rule is that a persistent squint needs early referral and correction. If treated early, the prospect of cure is excellent. Treatment commenced after the age of 7 is usually too late to save vision in the lazy eye. It goes permanently blind.

What is the treatment?

If one eye is 'lazy' (that is, not being used), it is standard practice to wear a patch (maybe on glasses) over the good eye for long periods in order to use the lazy eye and have both eyes eventually capable of vision. The usual practice for a significant squint is surgery by an ophthalmologist to tighten and strengthen the muscles in the lazy eye to make it look normal and also to improve function.

General points

- The myth, 'a squint will usually correct itself', is untrue.
- True or alternating squints need referral and correction.
- The 'lazy eye' will become blind if not working by 7 years of age.
- Early surgical correction of a true squint, preferably at 1–2 years, is best.

Normal eye position (note the same position of the white light reflex)

Convergent squint (affected eye on right of page)

Divergent squint (affected eye on right of page)

Pseudo squint (due to shape of eyelids)

Stress: coping with stress

What are the effects of stress?

Abnormal stress can have many troublesome physical and emotional effects on us, but they vary from person to person. Common problems are tiredness, fatigue, anxiety, sleep disturbance, poor concentration, restlessness and irritability.

Stress-related illnesses include depression, drug abuse (including problem drinking), irritable digestive system, peptic ulcers, headache, mouth ulcers, impotence, irritable bladder, dermatitis, heart disease, breast pain and cancer.

What are important causes?

We are constantly under some form of stress in our lives and generally cope very well. The most stressful circumstances leading to ill health have been shown to be death of a spouse or close family member, divorce and marital separation, imprisonment, personal injury or illness, marriage, retirement, sex difficulties, pregnancy, guilt over a wrongdoing and similar traumas. However, many of us feel unduly stressed over modern living and we need help.

What can you do to cope?

- Talk it over with someone—regular chats.
- Look for solutions: stop escaping.
- Practise relaxation (e.g. listen to music).
- Learn to meditate.
- Develop healthy hobbies.
- Do things that you enjoy (e.g. go to the movies or a show weekly).
- Practise a sensible, healthy diet.
- Exercise for 30 minutes, 4–5 times a week.
- Avoid smoking and other drugs and limit alcohol.
- Consider getting a pet.

Talking it over

'Getting it off your chest' is more important than you realise. Talk to someone you admire and trust. Going to a minister of religion or your doctor can be powerful, especially if you can feel forgiven and if any guilt is relieved. The traditional Christian sacrament of confession or reconciliation is noted to be very powerful in helping stressed guilty people.

Relaxation

Practising relaxation is vital for the uptight person. Meditation is excellent and classes are available, but you can practise yourself.

Make a commitment to yourself to spend some time every day practising relaxation. About 20 minutes twice a day is ideal, but you might want to start with only 10 minutes.

- Sit in a quiet place with your eyes closed, but remain alert and awake if you can. Focus your mind on the different muscle groups in your body, starting at the forehead and slowly going down to the toes. Relax the muscles as much as you can.

- Pay attention to your breathing: listen to the sound of your breath for the next few minutes. Breathe in and out slowly and deeply.
- Next, begin to repeat the word 'relax' silently in your mind at your own pace. When other thoughts distract, calmly return to the word 'relax'.
- Just 'let go': this is a quiet time for yourself, in which the stresses in body and mind are balanced or reduced.

Try to practise when your stomach is empty: before breakfast and before the evening meal are ideal times.

During the day, check yourself frequently for tension: take a few long, deep breaths and breathe away the tension.

Practise positive thinking. If you catch yourself thinking negative thoughts about your illness, silently say over and over to yourself: 'Every day, in every way, my health is getting better and better.'

Note: Prayer is an excellent form of meditation and relaxation.

Health through nutrition

A sensible approach to your diet can make you feel marvellous. *Increase* the amount of complex carbohydrates and fibre (vegetables, fruit, whole-wheat products, brown rice, fish, cereals, etc.) in your diet. Drink plenty of water. *Decrease* salt, total fats (butter, cream, meat fats, cheese, peanut butter, etc.), refined carbohydrates (sugars, sweets, cordials, ice-cream, cakes, etc.) and caffeine (coffee, tea and cola drinks). Reading *The Pritikin Promise* will provide many healthy ideas and recipes.

Exercise

Devise a program suitable for you. Walking for 20 minutes each day or every second day is an excellent start. A good callisthenic or yoga program is ideal.

Recommended reading

Dale Carnegie, *How to Stop Worrying and Start Living*, rev. edn, Cornstalk, Sydney, 1999.

Craig Hassed, *Know Thyself*, Hill of Content, Melbourne, 2002.

Ainslie Meares, *Life Without Stress*, Penguin Books, Melbourne, 1991.

Bob Montgomery & Lynette Evans, *You and Stress*, Penguin Books, Melbourne, 1995.

Norman Vincent Peale, *The Power of Positive Living*,- Vermilion, London, 1996.

Stroke

What is a stroke?

A *stroke*, also called a 'brain attack', occurs when an area of the brain is damaged following interruption to its blood supply. This results in deterioration of the mental and physical functions controlled by that particular area.

What is the cause?

There are three main causes:

- *thrombosis*: a clot forming in the artery to the area
- *embolus*: a small clot from elsewhere blocking the artery
- *haemorrhage*: bleeding into the brain (unlike the others, where the artery is blocked)

The risk factors for stroke are:

- high blood pressure
- high cholesterol
- diabetes
- smoking
- heart disease

What are the symptoms?

The symptoms depend on the area of the brain affected and the cause. A haemorrhage usually has a sudden onset and a less favourable outlook. Sometimes a stroke is mild and the effects pass off in a day or so.

Symptoms include:

- unconsciousness
- confusion
- loss of power of speech
- loss of movement of part of the body (e.g. on one side of the body)
- double or blurred vision
- difficulty understanding questions
- dizziness
- difficulty walking or using arms
- numbness on one side of the body

What is a transient ischaemic attack?

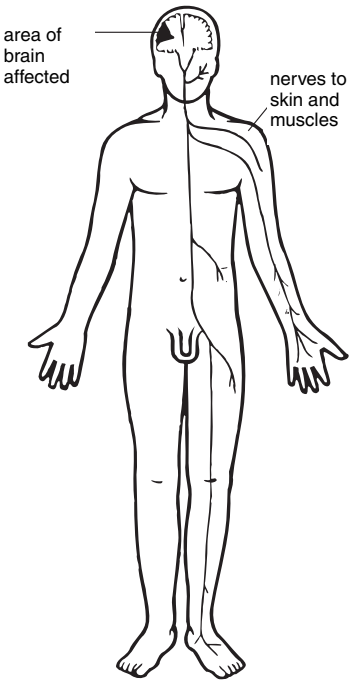
This is a transient loss of function due to a temporary blockage in the artery. It is usually caused by a small embolus and the patient recovers in a period ranging from a few minutes to 24 hours (average time 5 minutes). It can be a warning of an impending stroke, and so it needs urgent medical attention.

How common are strokes?

They are very common, especially in people over 65 years and more so in males. In Western countries they are the third commonest cause of death and after heart attacks the second commonest cause of sudden death. Those at special risk are those with high blood pressure, diabetes or high blood cholesterol and heavy smokers.

What is the outcome?

About one-third recover almost completely, one-third have some permanent disability and one-third will die.



Stroke: an accident to one side of the brain will lead to paralysis of the opposite side of the body

How can strokes be prevented?

The risk factors need to be checked, especially high blood pressure and cholesterol, which must be kept under control. Other things to do are avoid smoking, avoid excessive alcohol intake, eat a low-fat healthy diet, keep to ideal weight and have regular exercise.

If you have been found to have hardening of the arteries to the brain, you may be advised to have tablets to prevent blood clots (thrombosis) forming. Aspirin can do this, and only a small dose is needed. Garlic tablets are reported to help prevent clots, and special blood-thinning tablets called *anticoagulants* (commonly warfarin) can be prescribed.

Surgery

If a person has partially clogged arteries to the brain (the *carotids*), it may be possible to clean them out rather like a brush cleaning out a chimney. This is a good option in some patients, especially in those who have had transient ischaemic attacks.

What is the treatment for stroke?

Once the stroke has occurred, the brain tissue will not heal normally. Even though the person has survived, it is important to still attend to the risk factors, especially checking the blood pressure. Intense rehabilitation to get limbs and speech working again will begin. Ideally physiotherapy should be commenced in the first 2 days. This involves a team approach with the physiotherapist being the key person. The results are usually a pleasant surprise to all concerned, with a gradual improvement occurring over 2 years (at least).

Stuttering

What is stuttering?

Stuttering is a common disorder of speech in which a person who clearly knows what he or she wants to say has difficulty expressing it fluently.

The flow of speech can be affected by one or more of the following characteristics:

- difficulty starting to speak (maybe a silent period)
- speech interrupted with silent pauses
- repeated words or sounds (e.g. 'I I I I I think . . .')
- prolonged words or sounds (e.g. 'How are you feeeeeeling?')

There may also be associated body movements such as nodding of the head, shuffling of the feet or blinking of the eyes.

Many children can have a temporary phase when the flow of speech is abnormal but most of these do not develop a stutter.

Who is likely to stutter and when?

- It usually starts in childhood between 2 and 5 years.
- Stuttering can affect anyone but certainly runs in families. Children of parents who stutter have a greater chance of stuttering.
- It occurs in all races and classes of society and therefore in all languages.
- About 5% of children will stutter at some stage of speech development, and stuttering will persist into adulthood in 1% of children.
- Stuttering is about 3 times more common in males.

Note: Some children who stutter may avoid speaking.

Is stuttering associated with other developmental skills?

Definitely not. As a rule stuttering is not related to intelligence. Generally development in other areas is normal. It is interesting to find that many people who stutter do not have problems with other oral presentations such as singing and whispering.

What factors affect stuttering?

Children are more likely to stutter when anxious, such as when facing a 'stage fright' situation, reading to a group, talking about an unfamiliar topic or in unfamiliar surroundings. Other factors include getting tired, excited, emotional or argumentative, being rushed to speak and competing to be heard. Having to use certain difficult words can also cause a fluency problem.

When is help required?

Up to 65% of children who stutter gradually improve with increasing self-confidence and maturity of their language skills. These children may not need treatment. If the stuttering persists beyond 12 months or so from when it started it is unlikely to improve without special speech therapy and should be referred to a speech pathologist. Early treatment from the age of 2½ years is recommended, preferably at 2½ years but certainly before the age of 5.

Who provides specialist help?

Speech pathologists are the trained therapists who assess and recommend specific treatment for your child. They may be in private practice or employed in hospitals or community health centres. Units to treat stuttering can be found in most capital cities.

What is the nature and success rate of the treatment?

Treatment involves training to develop fluency with an emphasis on constant feedback and reward for clear speech. The aim is to train the child to speak confidently and fluently. Excellent results are now obtained with up to 80–90% success rate. Treatment will require regular visits and the involvement of parents.

Dos and Don'ts for parents

Do:

- praise your child for appropriate fluent speech
- be patient and ensure you listen to your child without interruption
- focus on what is being said rather than the process
- educate other family members to be tactful, patient and supportive
- repeat or paraphrase what is being said to encourage understanding and support
- reassure your child about any expressed concerns or frustrations

Don't:

- draw inappropriate attention to the problem, especially to other people
- criticise your child for stuttering
- allow family members to tease or ridicule the child
- place your child in situations that could cause embarrassment
- talk with them in order to correct or complete sentences
- interrupt the flow of speech

Sunburn

Sunburn is inflammation or redness of the skin caused by overexposure to the ultraviolet rays of the sun or to sun lamps. It is more likely to occur in people with light coloured skin.

What are the symptoms?

The effects of sunburn can vary from mild to severe.

Minor sunburn

- The skin is only mildly red.
- There is only mild discomfort for about 2 days.

Moderate sunburn

- The skin is red, hot and tender.
- Discomfort develops in only a few hours and settles in 3–4 days.
- There is some peeling of the skin.

Severe sunburn

- The skin is red, hot, painful and swollen.
- Blisters develop.
- If the sunburn is very severe, there may be headache, fever, nausea and possibly delirium.

What are the traps?

Sunburn is not caused only by exposure to the direct rays of the sun in the cloudless sky. It can also occur on hazy or overcast days, as thin clouds and light smog do not fully trap the effect of ultraviolet rays. Sunburn can also be caused by rays reflected off water, sand, snow and concrete. Taking various drugs (such as some antibiotics, hormones and tranquillisers) can increase the risk of sunburn.

What are the risks?

Severe sunburn can cause dehydration and skin loss, which may result in poor healing. Repeated sunburn or constant overexposure to the strong sun causes premature ageing of the skin with wrinkling and can lead to skin cancer.

What skin areas are most at risk?

The nose, cheeks, ears, back of neck and backs of the legs are most likely to be sunburnt.

How can you prevent sunburn?

- Avoid the direct sun from 10 am to 2 pm (11 am to 3 pm in daylight-saving time).
- Use a sunscreen with an SPF factor of 15 or more.
- Use natural shade. Beware of reflected light from sand or water and light cloud.
- Wear broad-brimmed hats and protective clothing.
- Wear muted colours such as light tan in preference to whites and bright colours.
- Use zinc oxide ointment for maximum protection.

What about sun tanning?

If this is necessary, restrict sun exposure to 5–10 minutes each side on the first day. Increase this by 5 minutes per side each day. Use a sunscreen (*not* suntan) lotion until tanning is underway.

What is the treatment?

- Hydrocortisone 1% cream or ointment is helpful for more moderate to severe sunburn. It should only be used in the first 24 hours and not on broken skin.
- Cold compresses ease heat and pain: dip gauze or towels in cold water and lay these on the burnt areas.
- Soak in a water bath containing oil (baby oil) or baking soda. Pat the skin dry afterwards.
- Oily calamine lotion can soothe after bathing.
- Aspirin or paracetamol relieves pain and any fever.
- Increase your fluid intake, especially for severe burns.
- Do not sunbathe until the redness and tenderness has disappeared.

Tantrums

What are childhood tantrums?

Temper tantrums are a type of behavioural disorder in children (especially in toddlers) whose protest to frustration is a dramatic reaction of temper. The tantrum can vary in time from as short as 20–30 seconds to as long as several hours.

The behaviour can include:

- kicking or stamping the feet
- shouting and screaming
- throwing things
- rolling around on the floor
- banging the head
- crying (without being hurt)
- holding the breath (which can be frightening)

Who gets the tantrums and why?

Any child can throw them. They are a feature of the so-called 'terrible twos'. They usually start at 15–16 months of age (can be as early as 12 months) and may persist until 3–4 years.

Tantrums are more likely to occur if the child is tired or bored and feels angry or frustrated. Reasons for this frustration may include:

- They are told 'no'.
- Things don't go their way.
- They cannot manage more difficult tasks.
- They cannot express what they want to say.
- Mother leaves them even for a brief period.

Sometimes there is no obvious reason. Tantrums may continue to occur if the child gets what they want, often when parents or other carers reward them to seek peace and avoid conflict. An example of this is when your child picks out a toy from the shelf of a shop and demands 'I want it'. You say 'no' and return it. The child gets upset, grabs the toy and shouts 'mine, mine'. If you give in to avoid a scene and say 'you can have it just this time', the child gets the message that 'no' can mean 'yes' if they protest strongly enough. So if tantrums work, they are likely to recur.

What are the principles of management?

If necessary, parents should seek expert advice. It is important to keep a record of the reason for the tantrums. Parents can be reassured that the tantrums are relatively common and not harmful. Remember the saying 'temper tantrums need an audience'. When ignored, the problem will probably get worse for a few days before it starts to improve. Plan ahead to prevent tantrums. Drugs have no place in the management of temper tantrums.

What are helpful rules to follow?

- Stay calm and say nothing.
- Look away.
- Move away.
- Ignore what can be ignored: parents should pretend to ignore the behaviour and leave the child alone without comment. This can include moving on to a different room and busying yourself with something else, but do not lock the child in his or her room.
- Be flexible: decide if the demands are reasonable before saying 'yes' or 'no' and stick to your decision.
- Avoid what is avoidable: try to avoid the cause or causes of tantrums, such as visiting the supermarket.
- Distract what is distractable: redirect the child's interest to some other object or activity that would interest them.
- Use 'time-out': consider firm action by taking the child to a safe room or space and insist they be quiet (usually for 2 minutes) before they come out of time-out.
- Make some realistic and firm rules to follow.
- Keep the child busy with activities in circumstances conducive to boredom and disruption.
- Praise appropriate behaviour as soon as it occurs.

What is a breath-holding attack?

The children hold their breath either during a tantrum or with a simple faint in response to a fright or pain (such as jamming a finger). In the case of a tantrum, they will let out a loud cry and then hold their breath.

They become pale and then blue which is quite frightening, especially if they become unconscious; if this happens, they should be placed in the coma position (the child is turned onto the side with both knees slightly bent together and the lower arm pulled out behind them). The whole episode usually lasts 10–60 seconds and is self-limiting. The child will start breathing again. It is not harmful. These attacks occur in the age group 6 months to 6 years but are most common when children are 2–3 years.

Tear duct blockage

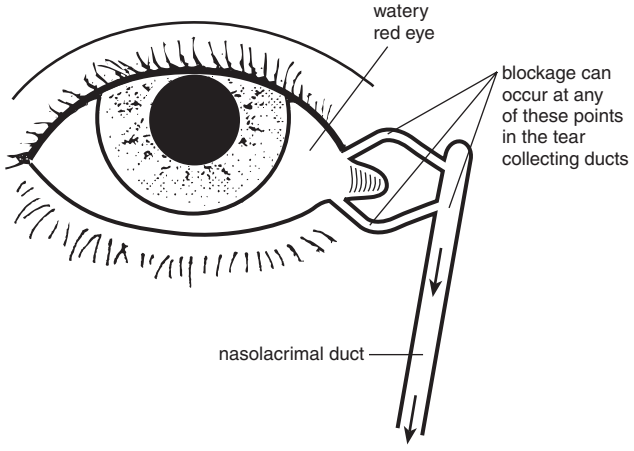
Blockage of the drainage of the tear ducts, sometimes causing infection, occurs in all ages but it is most common in children. Blockage due to narrowing of the drainage system for the tears is common in the elderly, especially in those exposed a lot to the weather (such as farmers). In these people, the eyes water easily, especially on exposure to wind.

What happens to tears?

Tears are continually produced in the lacrimal glands above each eyeball. These glands provide a thin film of watery fluid over the eyes. The tears drain by two very fine tear ducts situated on the inside corner of the eye (next to the nose). These lead into a much larger nasolacrimal duct which drains into the back of the nose.

What causes blockage of tears?

The commonest cause is inherited narrowing of the very fine ducts causing blockage of the duct. It usually becomes obvious in infants between 3 and 12 weeks. It may affect one or both eyes. There may be a family history of blocked tear ducts. Other causes in older people include injuries to the eye, fractured nose, sinus infection and eye infection.



What are the symptoms in infants?

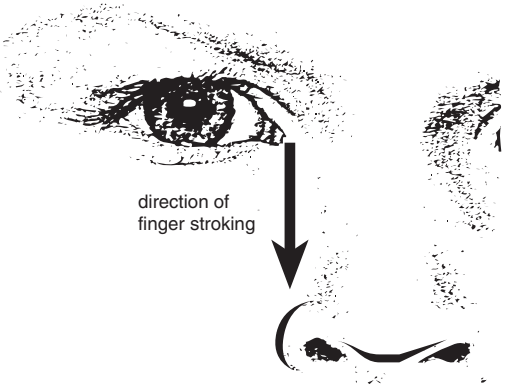
Excessive watering of the eye is the main sign. Mucus and yellow pus may appear in the tears. The discharge is worse on waking. This may clear up or progress to become obviously infected, with tenderness, redness or swelling of the surface of the eye or the tear duct (shown by a red painful swelling appearing in the skin beside the nose). In some infants, watering and discharge starts soon after birth because the tear ducts fail to open.

What can be expected?

In most cases, the problem improves by itself as all the body tissues grow and expand. Self-correction usually occurs from 6 months of age onwards or even earlier. Some cases are more severe and repeated infections are common. Conjunctivitis, which usually requires antibiotic drops or ointment, can develop. Warm soaks with cotton wool help soothe these cases.

How can it be helped simply?

The best method is for mother or the baby's carer to massage the drainage ducts several times daily. This is done by firmly (yet gently) placing the tip of the little finger over the inside corner of the eye and stroking firmly downward to the outer tip of the nose.



What is the treatment for persistent cases?

For more severe blockage or when eye watering has not settled by 12 months of age, the ducts can be probed and dilated under light anaesthesia. After dilation the tear-duct system is irrigated by forcing saline through a syringe into a fine blunt needle. This invariably solves the problem. Very rarely, an artificial duct will need to be fashioned surgically.

Teeth grinding (bruxism)

What is bruxism?

Bruxism is the habit of grinding, clenching or tapping teeth, which may occur while awake (especially in children), or while asleep (which is much more common).

What are the symptoms and signs?

The usual problem is annoying, teeth-grinding noises during sleep. The person may be oblivious to it but family members can be disturbed and annoyed by it, especially if it is loud enough to awaken them. The muscles on the side of the face may tighten and contract. This may cause headaches and temporomandibular joint dysfunction during the day.

What are the causes?

Bruxism is basically a habit, usually beginning at an early age. It may also be a response to subconsciously correct a faulty 'bite' by making contact between the upper and lower teeth when the jaws are closed. It is aggravated, maybe even caused, by stress and anxiety as it is noticed to be worse during stressful periods. It is also noticed to be associated with drug dependence, especially in heavy alcohol drinkers.

What are the risks?

The teeth are usually damaged, with wearing down of the crowns and loosening of the teeth. The supporting gums and bones may also be damaged.

What is the treatment?

Step 1: Acceptance

It is important for the patient to recognise and understand the problem and then make a conscious effort to overcome the habit.

Step 2: Simple tricks

- Practise keeping the jaws apart as often as you think about it.
- Slowly munch an apple before retiring.
- Place a hot towel against the sides of the face before retiring to achieve relaxation of the muscles controlling the jaw.

Step 3: Stress management

Learn ways to cope better with stress. Methods include counselling, meditation, relaxation exercises, yoga and tai chi. Although medicines are best avoided, your doctor may prescribe a tranquilliser or sedative, especially before you retire for the night, for short-term treatment.

Step 4: Dental treatment

Dentists can fashion and fit a plastic night-guard mouthpiece to prevent tooth grinding while asleep. This device, which is quite simple, is a removable splint that fits snugly over the teeth of each jaw to remove incorrect biting pressure.

Are there any special restrictions?

Apart from restrictions on alcohol and other drugs of dependence, there are no restrictions. There is no special diet and no restrictions on general activity.

What is the outlook?

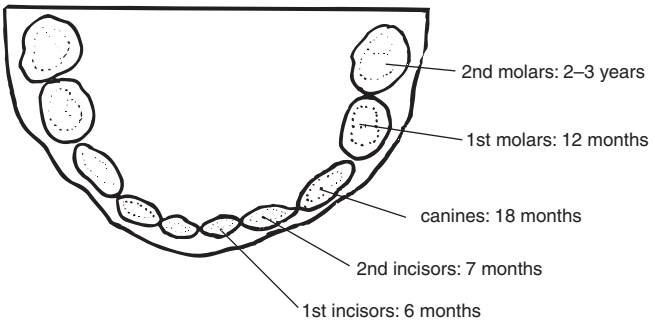
The outlook is good. With proper, persistent treatment, the problem is usually curable in 6–12 months.

Teething

When does teething occur?

Baby teeth (milk or deciduous teeth)

- Babies usually cut their teeth from age 6 months until 2–3 years.
- New teeth continually erupt during this time.
- The first teeth to appear are the lower incisors (during the first year). These seldom give much trouble.
- The first and second molars (between ages 1 and 3) tend to cause problems.
- Usually the first set (20 teeth) is complete soon after the second birthday.
- Be prepared for variations—some babies have teeth (1 or 2) at birth, while others have none at 1 year. This has no significance.
- These teeth are lost between 6 and 12 years.



Lower set of 10 'baby' teeth and times when they usually appear

Adult teeth

- Permanent teeth may appear as soon as the baby teeth fall out.
- If they appear before this, the dentist may have to extract the baby teeth.
- Permanent molars appear later, about 12 years.
- A full set is 32 teeth.

What are the symptoms of teething?

- The gum is slightly swollen and red. This may cause little or no discomfort, or may be quite painful.
- The baby is more clinging and fretful than normal.
- The baby dribbles more than usual.
- The baby wants to chew on something (such as fingers).
- The baby is irritable and crying (on and off for no more than a few days).
- The baby has difficulty with sleeping.

The problem usually settles quickly and it is important not to link coincidental illnesses such as fever, diarrhoea, vomiting, earache, convulsions, nappy rash and cough with teething.

Are pitted, dark teeth a problem?

Some children who are breastfed for long periods (such as 3 years) may develop unsightly pitting of the front surface of their teeth. This will not go away, but the parents should be reassured that the adult teeth will be normal when they appear.

What is the treatment?

Soothing methods

- Gentle massaging of the gum with the forefinger wrapped in a soft cloth or gauze pad is comforting. A gel such as Orosed can be massaged into the gums every 3 hours if the problem appears to be extremely troublesome.
- Place a face washer in the freezer and allow the baby to chew on the cool washer.
- Allow the baby to chew on a clean, cold, lightly moistened face washer. (A piece of apple can be placed inside the face washer.)
- Give the baby a teething ring (kept cold in the refrigerator) or a teething biscuit.

Medication

Medicine is usually not necessary for teething. Paracetamol mixture should be used for any discomfort. For more severe problems, especially if they are affecting sleep, an antihistamine or a combined mixture of antihistamine and analgesic can be given at night. Your doctor can advise you about this.

Other measures

- Cleaning the teeth at first with a face washer and then with a small soft toothbrush can commence when they appear, especially after the 8 incisors have erupted.
- Regular dental visits are advisable from about 3 years.
- Explain to children what they can expect about losing their first teeth.

Temporomandibular joint dysfunction

What is temporomandibular joint (TMJ) dysfunction?

It is an abnormal movement of the *mandible* (the jaw bone) in its socket at the base of the skull situated just in front of the ears. It is often caused by dental problems, but in many people there is no obvious cause. Uncommon diseases such as rheumatoid arthritis have to be ruled out.

What are the symptoms?

There is a discomfort or pain in the jaw in front of the ear, especially when eating. A clicking or clunking noise may also occur with movements of the jaw.

Is it a serious problem?

It is an annoying problem rather than a serious problem. Fortunately it responds well to treatment.

What is the treatment?

It is best to try simple methods first before embarking on expensive and sophisticated treatments.

For a very painful problem

The acute problem requires rest and support by following these rules:

- When eating, avoid opening your mouth wider than the thickness of your thumb and cut all food into small pieces.
- Do not bite any food with your front teeth—use small bite-size pieces.
- Avoid eating food requiring prolonged chewing, e.g. hard crusts of bread, tough meat, raw vegetables.
- Avoid chewing gum.
- Always try to open your jaw in a hinge or arc motion. Do not protrude your jaw.
- Avoid clenching your teeth together—keep your lips together and your teeth apart.
- Try to breathe through your nose at all times.
- Do not sleep on your jaw—try to sleep on your back.
- Practise a relaxed lifestyle so that your jaws and face muscles feel relaxed.

For the nagging problem

Once the acute phase has settled it is best to strengthen the muscles and joints by performing a set of exercises. They are uncomfortable at first, but the problem usually starts to settle after about 2 weeks.

'Chewing' the piece of soft wood exercise

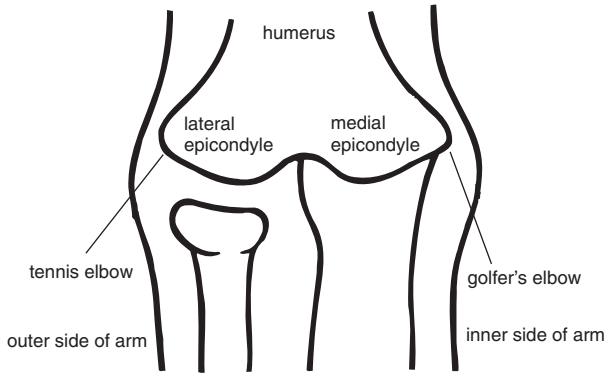
- Obtain a rod of soft wood about 15 cm long and 1.5 cm wide. An ideal object is a large carpenters pencil.
- Position this at the back of the mouth so that the molars (back teeth) grasp the object with the jaw thrust forward.
- Rhythmically bite on the object with a clenching movement for 2–3 minutes. Do this at least 3 times a day.

'Chewing the wood' exercise

Tennis elbow

What is tennis elbow?

Lateral epicondylitis ('tennis elbow' or 'backhand tennis elbow') is inflammation of an important forearm muscle tendon at the point of attachment to the outer side of the elbow bone. Tennis players are not the only sufferers. It is common in golfers, carpenters, bricklayers, violinists and housewives, especially those between 35 and 55 years of age.



Anatomy of the elbow

What causes it?

Tennis elbow is the result of repeated bending and twisting movements of the arm, such as when playing golf and tennis, using a screwdriver, wringing wet clothes, carrying buckets or picking up bricks. It affects tennis players who use a lot of wrist action in a faulty backhand movement, especially when they are unfit. The force of the ball hitting the racquet is greater than the strength of the muscle; the muscles of the forearm thus become overstrained. The strains, initially painless, cause small tears in the tendon. As they start to heal, more tears occur and painful inflamed scar tissue forms.

What are the symptoms?

The outer bony projection of the elbow (the *lateral epicondyle*) is painful. For some people the pain is constant and can interfere with sleep.

The forearm aches with grasping and lifting movements such as pouring tea, turning stiff handles, ironing clothes and typing. Even simple things like picking up a glass, shaking hands or brushing teeth can cause pain.

What is the treatment?

Tennis elbow is stubborn to treat but almost always curable. The two bases of treatment are:

- rest (avoiding the cause, e.g. stop playing tennis)
- exercise (to strengthen the forearm muscles, which bend the wrist)

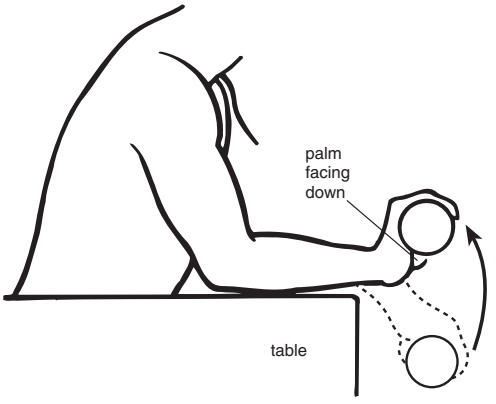
Your general practitioner might recommend a cortisone injection to speed recovery. Sometimes it can take 1–2 years to heal. A course of anti-inflammatory drugs is worth a trial—take for 2–3 weeks before reviewing their effect.

Exercises

Use a dumbbell or similar type of weight such as a bucket of water. Start with 0.5 kg (1 lb) and build up gradually to 5 kg.

1. Sit in a chair beside a table.
2. Rest your arm on the table so that the wrist is over the edge.
3. With your palm facing downwards, grasp the weight.
4. Slowly raise and lower the weight 12 times. Rest for 1 minute.
5. Repeat twice.

Do the exercise every day until you can play tennis, work or use your forearm without pain.



The dumbbell exercise

The towel-wringing exercise

This hurts at first, but usually cures the problem by 6 weeks. Roll up a handtowel and, with your arms straight, grasp the towel, then wring it slowly so that your wrist is fully bent forwards. Hold for 10 seconds, then reverse the wringing action to extend your wrist; hold for 10 seconds. Gradually, increase the time by 5 seconds until you can hold for 60 seconds. Do this twice a day, twice in each direction. Many people prefer to do this exercise using a large face washer while showering.

Tennis

Do not use a tightly strung, heavy racquet or heavy tennis balls. Keep your strokes smooth and try not to bend the elbow. Start the game quietly, taking time to warm up to it.

The 'other' tennis elbow

Medial epicondylitis ('forehand tennis elbow', 'golfers' elbow' or 'pitchers' elbow') is less common and usually less severe. The treatment is the same, but the palm must face upwards for the dumbbell exercise.

Armbands

Some tennis players use a non-stretch band or brace around the arm, about 7.5 cm (3 inches) below the elbow. You might not find it helpful, but it is worth trying. Bands are available from (some) pharmacists, tennis shops and orthopaedic appliance firms.

Tension headache

What is tension headache?

Tension headache, which is also referred to as tension-type headache or muscle contraction headache, is a tight constricting pain covering most of the head and is associated with stress or tension. It is the most common form of headache.

Many sufferers do not realise that the headaches are associated with tension until it is pointed out to them.

What is the cause of tension headache?

Overactivity of muscles of the scalp, forehead and neck causes tension headache. A dull ache or tightness in these areas, like a tight band around the head or a heavy weight on top, results from this overactivity.

Trigger factors

- increased tension or stress (both mental and physical), for example:
  — excessive worry
  — all work—no play
  — long periods of study, typing or other concentration
  — perfectionism
- increased tension in the neck muscles, for example:
  — poor posture
  — injuries to the cervical spine (neck)
- repressed hostility, anger or frustration
- a poor, scrappy diet, for example eating on the run (combined with stress)

What is the treatment?

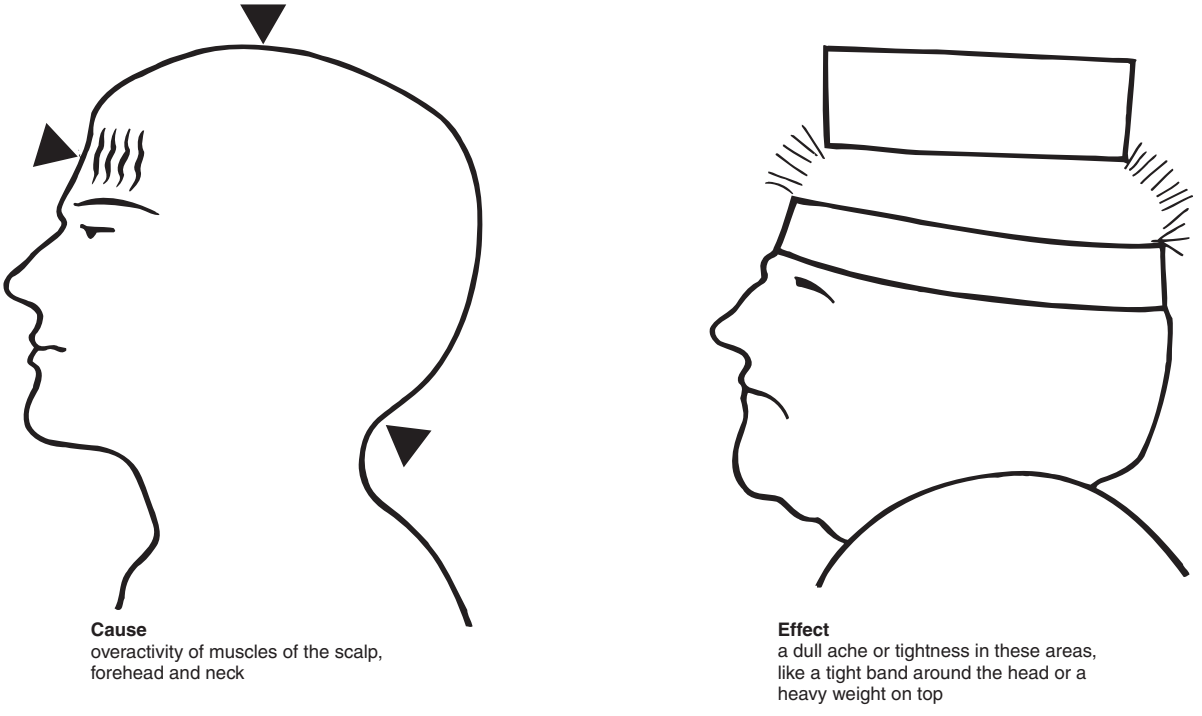
Drugs

A mild pain-killer such as aspirin or paracetamol can help stop the pain, but avoid stronger drugs (including tranquillisers) unless directed by your doctor.

Self-help

The best treatment is to modify your lifestyle in order to eliminate or reduce the trigger factors. For example:

- Learn to relax your mind and body.
- During an attack, relax by lying down in a hot bath or spa with a warm dry cloth (or even a cold wet cloth) over the aching area.
- You could attend special relaxation courses such as yoga or meditation classes.
- Be less of a perfectionist; do not be a slave to the clock.
- Do not bottle things up. Stop feeling guilty. Approve of yourself. Express yourself and your anger.
- If your neck is aching, massage or mobilisation followed by special exercises should help.

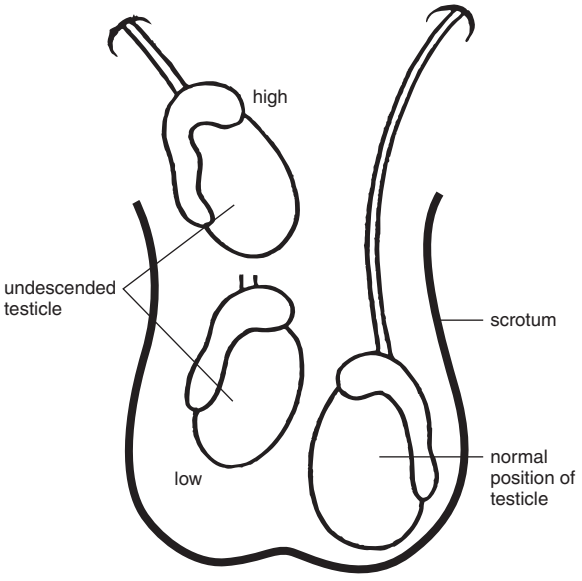


The cause and effect of tension headache

Testicle, undescended

What is an undescended testicle?

It is a disorder of boys in which one or both of the testicles (the male sex glands) have not descended into their normal position in the scrotum. The testicles develop inside the abdomen in the foetus and start their descent through the abdominal wall so that it is usually complete by a month before birth. The testicles are attached to the body by long cords called 'spermatic cords'.



How common is it?

It is a very common problem, present in about 4% of newborn males and as high as 25% in premature males. The exact cause is not known.

What happens in infancy?

Many undescended testicles complete their descent during the first 12 weeks after birth but after 12 weeks spontaneous descent is uncommon. 1–2% of testicles are still undescended at 1 year.

What are the symptoms?

Undescended testicles cause no symptoms. The condition is not painful and urination is normal. One notices that the scrotum appears undeveloped on the affected side and the testicle cannot be felt in its normal position.

What is an acquired undescended testicle?

Sometimes the testicles are present in the scrotum at birth but with the growth of the child the spermatic cord does not keep up with the general body growth. By about school age the testicles are undescended and sit high in the groin.

What are the risks?

If left untreated, there is an increased chance of reduced fertility and sterility in some males. This is apart from the psychological effects of the altered male self-image. The main concern is the risk of cancer in the undescended testicle, which is up to 10 times greater than normal. The cancer eventually develops in young adults between 20 and 40 years of age.

What is the treatment?

If the problem has not corrected itself in the first few months, early surgery is necessary to locate the testicle and bring it into the scrotum by freeing and stretching the spermatic cord to which it is attached.

The recommended ideal time for this surgery is between 6 and 18 months of age, with 12–15 months being the most popular time for surgeons to operate.

It is still acceptable to operate at 5 to 7 years if the diagnosis is delayed or the problem has developed since birth. However, it has been shown that the quality of sperm production diminishes from the age of 2 onwards in the undescended testicle. A hernia is often associated and can be corrected at the same time.

Testicular self-examination (TSE)

Why bother with TSE?

Although testicular cancer is rare, it is the commonest cancer in men between the ages of 15 and 34 years.

With early detection and recent advances in chemotherapy, testicular cancer is one of the most easily cured cancers. Some patients are only diagnosed after the tumour has well and truly spread into the body, but even these patients can respond well to modern treatment.

It is useful for young men to carry out TSE with the same regularity as women carry out breast self-examination. The examination is necessary for the early detection and for the successful treatment of cancer. Any delay in the diagnosis should be avoided. TSE might be a life-saving health habit especially if the following issues of past history apply:

- a family history of testicular cancer
- testicular atrophy (e.g. mumps, trauma)
- delayed repair of undescended testes
- previous testicular cancer

What are the causes of testicular cancer?

They are not exactly known, but some factors that may lead to it are an undescended testicle, trauma (injury), heat exposure and heredity.

What are the symptoms?

The usual symptoms of testicular cancer include a lump on the testicle, painless swelling and a dull ache or heavy dragging sensation in the lower abdomen, groin or scrotum. The early symptoms are therefore mild and tend to be overlooked.

How to do TSE

Testicular self-examination is a simple procedure which is useful for young men to learn. Examination is best done using two hands, as illustrated.

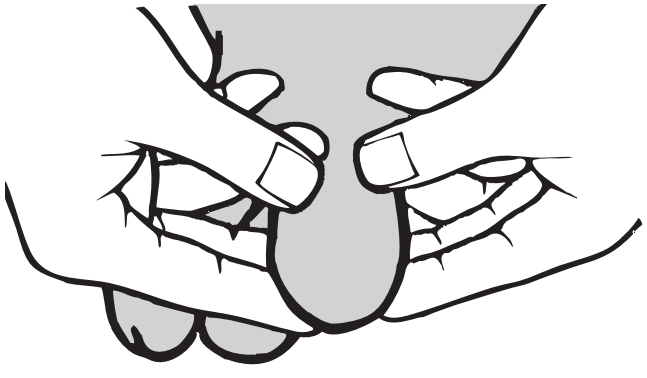
- Explore each testicle individually.
- Using both hands, gently roll the testicle between the thumbs and fingers. If pain is experienced, too much pressure is being applied.

The examination should be done about once a month, preferably after a warm bath or shower, when the scrotal skin is most relaxed.

What to look for

A normal testicle is egg-shaped, fairly firm to touch and should be smooth and free of lumps. When you examine the testicles, you should feel for any changes in size, shape or consistency. If you do find something abnormal, most likely it will be an area of firmness or small lump on the front or on the side of the testicle.

Do not confuse the *epididymis* (the soft tube-like structure at the back of the testicle) with a tumour. If you do find something abnormal, you should see a doctor as soon as possible. However, remember that not all lumps are due to cancer.



TSE technique

TSE is best performed after a warm bath or shower

Thumb sucking

What does thumb sucking involve?

It involves placing the thumb or finger on the roof of the mouth behind the teeth (hard palate) and sucking with the mouth closed. It is basically a habit and should not be regarded as an abnormal disorder. It is one of the first pleasurable acts that the infant can manage.

How common is thumb sucking?

It is very common and occurs in children of both sexes up to the age of 12 years, but is commonest in children under the age of 4 years.

What can bring on thumb sucking?

It usually starts for no apparent reason. The child tends to suck the thumb when relaxing, such as when watching television or when put to bed before going to sleep. It also tends to occur when the child is ill, hungry or tired.

Insecurity, such as the arrival of a sibling in the family, can increase thumb sucking; it can be related to an apparent withdrawal of parents' attention.

What are the risks?

Thumb sucking should be regarded as normal and usually settles by the age of 6 or 7. However, if it persists beyond this age it can cause problems with the permanent teeth, which begin to appear at about the age of 7. One effect is that the pressure on the front teeth may cause protrusion of these teeth (i.e. buck teeth).

How can it be prevented?

It is best to provide other comfort measures in infants if this habit is developing. Giving the infant a dummy (pacifier) is preferable. If the habit persists, avoid making it an issue and thus drawing attention to it.

What is the treatment?

No special medicine or diet is necessary.

What to avoid

- nagging
- punishment
- scolding
- gloves, mittens or arm splints
- bad-tasting chemicals on the thumb or finger

What to do (for a child over 6 years)

- Carefully observe things that provoke thumb sucking.
- Find ways of avoiding these trigger factors.
- Provide extra attention.
- Organise pleasant distractions.
- Give praise and rewards for efforts to stop.

When to seek help

- if the problem persists after 6 years, especially if it is excessive and persistent
- if the child wishes to stop but cannot despite good efforts (even when offered rewards for good attempts to stop)

In such situations special counselling may be required. Sometimes the help of the dentist to fit a special training device in the mouth may be required.

Remember

Thumb sucking is usually a passing habit that most children grow out of by school age. Special treatment is rarely necessary. Avoid giving attention to the problem, but give plenty of attention to the child.

Tinea pedis

Tinea pedis, also called *athlete's foot*, is a fungus infection of the skin of the feet. The fungus, called *tinea*, grows in the skin between and under the toes, especially the outer two little toes. Sometimes it spreads to the soles of the feet. It may also grow on the toenails, which become thickened and whitish-yellow. The same type of fungus may infect the skin of the groin, especially the scrotum in men. This condition is called 'jock itch'.

The area most commonly affected

What are the symptoms?

The commonest symptoms are itchiness and foot odour. The skin becomes red, flaky and itchy. Sweat and water make the top layer of skin white and soggy.

How common is it?

Tinea pedis is very common, but many people do not find it troublesome enough to visit their doctor. Men are affected more than women.

Is it serious?

Tinea pedis is a harmless condition.

What is the treatment?

Self-help

- Keep your feet as clean and dry as possible.
- Carefully dry your feet after bathing and showering.
- It is good to dry your feet with a hairdryer.
- After drying your feet, use an antifungal powder, especially between the toes.
- Remove flaky skin from beneath the toes each day with dry tissue paper or gauze.
- Wear light socks made of natural absorbent fibres, such as cotton and wool, to allow better circulation of air and to reduce sweating. Avoid synthetic socks.
- Change your shoes and socks daily.
- If possible, wear open sandals or shoes with porous soles and uppers.
- Go barefoot whenever possible.
- Use thongs in public showers such as at swimming pools.

Wear well-ventilated sandals or open shoes to keep the feet dry

Medication

The old-fashioned remedies such as tea tree oil (*melaleuca alternifolia*), Castellani's paint, Whitfield's ointment and tolnaftate are still useful for mild cases, but the best treatment is one of the new antifungal creams or solutions such as clotrimazole, miconazole or terbinafine. These should be gently applied after drying, 2 or 3 times a day as directed for 2–3 weeks.

If the condition is severe and stubborn, your doctor may prescribe a course of tablets.

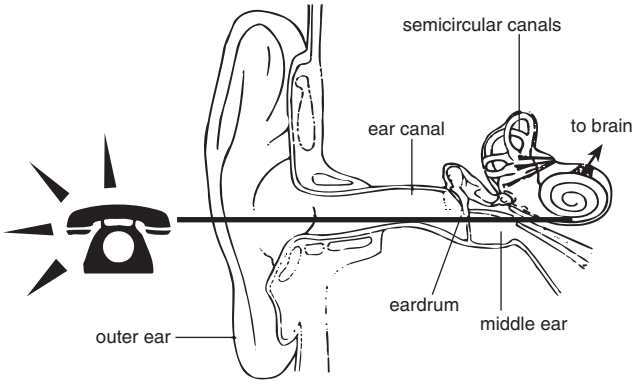
Tinnitus

What is tinnitus?

Tinnitus is hearing abnormal noise in the ear or head when there is no sound coming from the outside.

The word *tinnitus* comes from the Latin *tinnire*, which means 'to ring'.

Although it usually refers to ringing in the ear, tinnitus may include buzzing, roaring, whistling, hissing or a combination of sounds.



How common is tinnitus?

Although most of us experience tinnitus at some time, especially with a lot of wax blocking an ear, it is only a temporary problem. About 1 in 4 people are bothered by it, but it is a severe problem for 2% of the population.

What causes or aggravates it?

- ear disorders such as infection
- excessive noise exposure for a long time
- wear and tear of the ear with ageing
- some prescribed drugs
- stress and fatigue
- excessive alcohol
- heavy smoking
- social drugs, including caffeine and marijuana
- head injury

How serious is tinnitus?

Tinnitus in itself is not a serious condition, does not cause pain or deafness but can be frustrating. Most people with tinnitus have a hearing loss, but there are also many people with normal hearing who have tinnitus. Many people with tinnitus worry that it is a symptom of a brain tumour, a stroke, a nervous disorder or some other serious head problem. However, this is rarely the case.

What are its effects?

The main problem is the psychological effect, as the noise tends to affect one's concentration, ability to think and peace of mind. Stress can aggravate the problem.

It can also be a problem at night, when it is more noticeable and affects the ability to sleep.

What can be done for tinnitus?

Tinnitus is less noticeable when there is background noise, and therefore it is important to 'switch off' from the ear ringing as much as possible and focus on other noise.

The following methods can help one cope with tinnitus:

Stress management and relaxation techniques

Since tinnitus is more noticeable when you are stressed, tired or emotionally upset, learning relaxation or meditation techniques to focus your attention elsewhere may be helpful. Some patients are helped by hypnosis. Your doctor will advise on these methods.

Background sound treatment

A useful treatment, especially for those having trouble getting to sleep, is to have background music playing when retiring at night. Other sounds that are sometimes used include FM static produced by a radio set off the station and environmental sound-masking tapes.

Tinnitus maskers

Some people are helped by wearing a tinnitus masker, which is a device like a hearing aid worn behind the ear. It produces a type of hissing noise that tends to counterbalance the tinnitus noise.

Hearing aids

If a hearing loss accompanies the tinnitus, the use of a hearing aid can mask the tinnitus with amplified sound. This makes it easier to focus on outside sound.

Distracting activities

Some people can cope by diverting their attention away from their tinnitus by keeping themselves busy and undertaking interesting activities that focus their mind elsewhere. Examples include gardening, power walking, music, television, handicrafts, jigsaw puzzles, card playing and discussion groups.

Counselling and support

Most cities have a counselling service for tinnitus sufferers. Ask your doctor about the Australian Tinnitus Association.

Toilet training your child

What is normal?

As a rule children will learn to use the toilet when they are ready.

The age that most are fully trained are:

- daytime—between 2½ and 4 years
- night-time—by 8 years of age

Your child will have their own individual pattern and it is unwise to get upset if they seem slow compared with other children who may train very early.

General rules for parents

- Be relaxed about toilet training.
- Avoid rushing toilet training.
- Do not force your child to go to the toilet.
- Nagging does not work well.
- Punishing will not work.

When is your child ready for toilet training?

The rule is to start when your child shows signs that they are ready. These include:

- telling you they are wet or soiled
- being concerned about this
- showing an interest in the toilet
- wanting to sit on the toilet
- waiting to sit on the toilet
- waiting or controlling the urge to wet or soil
- removing their pants or undressing
- soaking their nappies
- longer dry periods between wetting
- regular bowel movement pattern

It is important not to start training if the child is unwell.

How long does toilet training take?

Children are different and vary—some learn quickly, others take a long time and you need to be patient. Once they start it usually takes about 4 weeks before they are dry, but some can take several months. Learning to pass urine is easier than opening the bowels in the toilet.

It is common for children who are dry during the day to wait to open their bowels when their nappy is on, especially during naps. Many still tend to accidentally wet or soil a year or more after starting training. It is good to work together with your child carers (e.g. day care, kindergarten).

What do you need?

It is best to use a toilet training potty. If you use the toilet you need a toilet seat ring and a solid step to support your child's feet.

Preparing your child

- Put your child in pants.
- Explain what the potty is for and let them sit on it.
- Work out their pattern of passing urine and faeces and sit them on the potty or toilet at these times when starting to train.
- Stop using nappies (except when sleeping).
- Use clothes that are easy to get on and off.

Training method

Choose a day when you are at home to begin telling them about the steps to follow, for example:

- Tell mummy or daddy.
- Go to the toilet or bathroom.
- Take off your pants.
- Sit on the toilet.
- Do a wee or a poo.
- Wipe yourself or ask someone to help.
- Flush the toilet.
- Wash and dry your hands.

Best times to sit them on the toilet

- first thing in the morning
- after meals
- when you sense their need to go
- before going out
- upon returning home

Special tips

- Give lots of encouragement and praise.
- Give your child lots to drink.
- Ask your child if they need to go.
- Sit the child on the toilet for about 5 minutes, but don't force them.
- Help your child to relax on the toilet.
- Teach your child to wash their hands.
- Handle 'accidents' calmly and use the opportunity to teach the toileting steps.
- Get boys to sit on the toilet at first to urinate.
- Dad can show boys how to urinate while standing.
- Keep nappies on at night until they stay dry.
- If the training upsets them, wait for a month and try again.

Key points

- Use a potty or toilet with a seat ring and a step.
- Explain the process in simple terms.
- They will learn to use the toilet when they are ready.
- Sit both boys and girls on the toilet to pass urine.
- Do not force them if they refuse to use it.
- Make a fuss of success—praise and reward them.

Tongue soreness

What are the causes of tongue soreness?

The common causes of a sore tongue are:

- trauma from teeth, especially sharp teeth and bites
- hot food and drink
- aphthous ulcers
- geographic tongue

A painful tongue, which is uncommon, usually has a burning pain on the tip of the tongue and is considered to be due to a nervous disorder.

Geographic tongue

Geographic tongue is a non-serious inflammatory condition of unknown cause in which a changing pattern of smooth red patches with a raised margin that can be coloured white, yellow or grey, appears on the tongue.

The pattern resembles a relief map with mountain ridges, hence the term 'geographic'. The patches move around to other parts of the tongue with a major change occurring every 3 weeks. The process may then subside and go into remission which may be complete or partial. However, it may return at a later time. Anyone can get it.

What are the symptoms and signs?

There are usually no symptoms—it is not painful or itchy nor does it taste bad. However, some people can experience tenderness or stinging, especially with certain foods (usually spicy foods). The main complaint from people is the unusual appearance of the tongue which continually changes. The area affected is the top surface and edges.

What are the risks and outlook?

There are no risks associated with this problem, hence the term *benign migratory glossitis*. It is harmless and there have been no reported serious consequences.

The outlook is excellent. It is a self-limiting condition and usually settles after about 6 weeks. However, it may flare up again at some time in the future.

What is the treatment?

There is no specific treatment, drug nor process for it.

People can be reassured not to be concerned about it. If they are unaware of it and it causes no symptoms then no applications at all are recommended. However, it is advisable to avoid spicy foods and practise good oral hygiene, including cessation of smoking if it aggravates the condition. People subject to considerable stress or anxiety should seek help to reduce the impact of these lifestyle factors.

For a tender tongue

Use Cepacaine gargles: 10 mL 3–4 times a day for about 3–5 minutes then spit out.

For a persistent and troublesome tongue

Use a low-dose steroid spray as used to treat asthma; for example, beclomethasone 50 micrograms: spray on 3 times a day and try to leave on the tongue for a couple of minutes. Don't rinse out the mouth.

Black tongue

Black tongue, also called *brown tongue*, is a term sometimes used to describe a black or dark discolouration or stain on the top surface of the tongue. It is a harmless condition but its appearance and presence cause people with it considerable concern.

What are the symptoms?

People with black tongue usually complain of a bad taste and dryness in the mouth. It may be responsible for bad breath and be associated with feeling 'off-colour'.

What is the cause?

In many instances its cause is unknown—it just develops. One well-known cause is antibiotic treatment which can cause an alteration in the normal flora (bacteria and fungi) which reside in the oral cavity. Simply stopping the antibiotics will resolve the problem.

Another cause is an inappropriate diet which contains no roughage—especially fruit, vegetables and cereals. This is usually seen in older people who have to battle by themselves and have a 'tea and toast' diet.

Poor general oral hygiene with neglected teeth and the use of tobacco and alcohol coupled with poor nutrition are other common associations. Black tongue may also be associated with stress and a depressive illness.

Treatment

Lifestyle management

This involves a good nutritious diet and drinking lots of fresh water. Eating raw fruit and vegetables that provide roughage on the tongue and in the mouth is advisable. Good examples are apples, celery and carrots. Try to drink up to 2 litres of water a day. You can prepare water with lemon juice and use a plastic bottle to squirt it into your mouth several times a day. Otherwise frequent sips of water help the problem. Good dental hygiene is important so regular check-ups are also advisable.

If you smoke or chew tobacco try to quit this habit. If you are under excessive stress and 'burning the candle at both ends' try to amend this with a more relaxing, healthy outdoor lifestyle. Adequate rest and recreation should be a major goal in your life.

The pineapple treatment

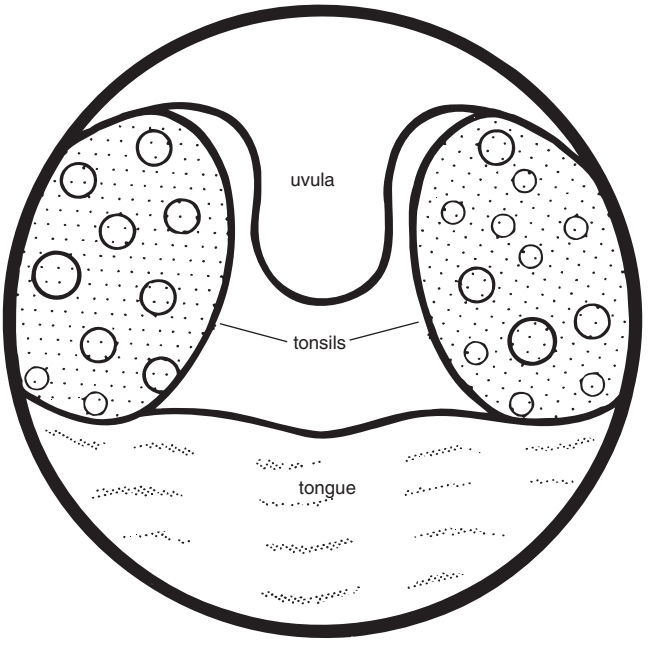
Cut a thin slice of fresh pineapple into 8 segments. Slowly suck a segment on the back of the tongue for 40 seconds and then slowly chew it. Repeat this until the entire slice is finished. This should take about 8 minutes. Do this twice a day for 7–10 days by which time the tongue usually returns to normal. Repeat this should the discoloured tongue return.

If you have irritable bowel syndrome, talk to your doctor because the salicylic acid in pineapple may aggravate the condition.

Tonsillitis

What is the cause of tonsillitis?

Viruses or bacteria (germs) break through the tonsils' defence and cause red, swollen, painful tonsils, often with pockets of yellow pus. Tonsillitis may be a feature of glandular fever.



View of the throat with the two tonsils

What are the symptoms?

Symptoms include sore throat, fever, muscle aches, lethargy and swollen glands on either side of the neck. Often children experience abdominal pain and may not complain about a sore throat.

What is the treatment?

Activity

Be as active as your energy permits, but rest if feeling unwell or feverish.

Diet

If your throat is very painful, confine yourself to fluids, including milkshakes and soups. Avoid smoking, and very hot food and drink.

Medication

- *Pain-killers*. Take paracetamol or aspirin for pain relief.
- *Antibiotics*. Penicillin is usually chosen provided the patient is not allergic to it or does not have a viral infection such as glandular fever. Complete any course of antibiotics prescribed. In streptococcal tonsillitis the symptoms usually disappear after 2 days or so of treatment, but it is important to continue penicillin (or other prescribed antibiotic) for 10 days to eradicate the *Streptococcus* organism, which can cause rheumatic fever and glomerulonephritis. However, many cases of tonsillitis are due to a virus and antibiotics are not needed.

What about tonsillectomy?

Doctors are reluctant to remove the tonsils because they play an important role in the body's fight against infection. Isolated attacks or large tonsils are not grounds for an operation. However, if the tonsils become a focus of chronic infection or if several severe attacks of tonsillitis occur in one year, removal may be required.

Tonsillitis in children

Most children experience attacks of tonsillitis during preschool and early school years, when the tonsils are normally large and defences against infection are not fully developed.

For most children, proper treatment of acute attacks is all that is required. The attacks will become less frequent as the child matures; tonsillectomy is advised only in exceptional circumstances.

Travel sickness

Who gets travel sickness?

Almost everyone is sick when sailing on rough seas. However, some people—especially children—suffer sickness from the effect of motion on a boat, in a car or in a plane. The larger the boat, plane or car, the less is the likelihood of sickness; travel by train rarely causes sickness.

Nearly all children grow out of the tendency to have travel sickness, but many adults remain 'bad sailors'.

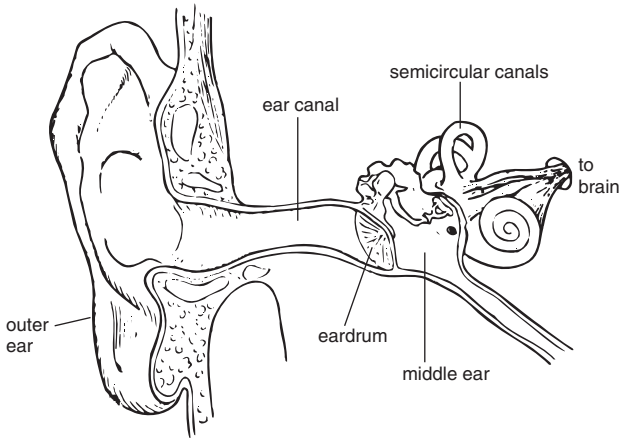
What are the symptoms?

Nausea, vomiting, dizziness, weakness and lethargy are the main symptoms. Early signs are pallor and drowsiness, and sudden silence from an active, talkative child.

What causes it?

The problem arises in the semicircular canals of the inner ear. They are set deep in the thick skull bone and are the body's balance mechanism.

They are affected by the movement and vibration of travel. Some people have sensitive inner ear canals and are prone to sickness, especially on certain types of journeys (e.g. winding roads through hills) and in certain vehicles.



What is the treatment?

1. Keep calm and relaxed before and during travel.

   With children, avoid excitement and apprehension about the travelling. Encourage activities such as looking at distant objects; discourage activities such as reading and games that require close visual concentration.
2. Lie down, if possible, because this rests the inner ear canals and reduces the urge to vomit. If travelling by car, stop regularly for breaks. Passengers should use the front seat if possible.
3. Do not have a large meal a few hours before the journey or during it; avoid milk and fried or greasy foods.

   Do not travel with an empty stomach: have a light, simple meal about an hour before and do not drink too much. Glucose drinks such as lemonade are suitable, as are glucose sweets and biscuits while travelling.

Medication

Many medicines are available for travel sickness as either oral preparations or skin patches.

Tablets

These are good for mild travel sickness. It is desirable to take oral medication for travel sickness 60 minutes before the trip. During a long trip this can be repeated 3–4 times a day to prevent the symptoms.

Some medicines such as antihistamines make you drowsy, so take care: this sedative effect may be good for children or for those travelling long distances by plane.

Ginger

Some people find that ginger helps so it is worth drinking ginger beer or ginger ale before and during travel.

Skin patches

Scopolamine adhesive patches are the most widely used medication for long-term travel, especially sea travel. One patch should be applied to dry unbroken hairless skin behind the ear 5–6 hours before travel. It should be left on for 3 days but removed immediately the trip is over.

Wash the hands thoroughly after applying and removing the disc—be careful not to touch your eyes with your fingers after doing this.

Travel: air travel

Flying has revolutionised travel. Air travel is safe and comfortable; however, 'air sickness' and jet lag are problems that face many travellers.

What is jet lag?

This is the uncomfortable aftermath of a long flight in which the person feels exhausted and disoriented, has poor concentration, insomnia and anxiety. The problem on arrival is poor concentration and judgment during daytime.

Other symptoms that may occur include anorexia, weakness, headache, blurred vision and dizziness.

Jet lag is a feature of flying long distances east-west or west-east through several time zones, causing the person's routine daily rhythm of activity and sleep to get out of phase.

What factors influence jet lag?

General factors

Noise, vibration, air humidity and sitting still for long periods can influence jet lag.

Specific factors

Duration of the flight, time of departure, changes in climate and culture at the destination affect the severity of jet lag. The problem is aggravated by:

- stress of the pretrip planning
- last-minute rushing and anxiety
- lack of sleep during the trip
- overeating and excessive alcohol during the flight
- smoking

How can you minimise the problem?

Careful planning and a few simple hints observed during and after the flight can ease jet lag.

Before the flight

- Allow plenty of time for planning.
- Plan a 'stopover' if possible.
- If possible, arrange the itinerary so that you are flying into the night.
- Ensure a good sleep the night before flying.
- Ensure a relaxed trip to the airport.
- Take along earplugs if noise (75–100 decibels) bothers you.

During the flight

- *Fluids*: Avoid alcohol and coffee. Drink plenty of non-alcoholic drinks such as orange juice and mineral water.
- *Food*: Eat only when hungry and even skip a meal or two. Eat the lighter, more digestible parts of your meal.
- *Dress*: Women should wear loose clothes (e.g. long skirts, comfortable jeans, light jumpers) and avoid girdles or restrictive clothing. Wear comfortable (not tight) shoes and take them off during flight.
- *Smoking*: Reduce smoking to a minimum. Non-smokers should seek a non-smoking zone.
- *Sleep*: Try to sleep on longer sections of the flight (give the movies a miss). Close the blinds, wear special eye 'masks' and ask for a pillow. Consider using sedatives such as temazepam (Euhypnos or Normison).
- *Activity*: Try to take regular walks around the aircraft and exercise at airport stops. Keep your feet up when resting, and exercise by flexing the major muscles of the legs. Avoid resting the calves of your legs against the seat for long periods. This also helps prevent deep venous thrombosis.
- *Melatonin*: This hormone is closely linked with our sleeping patterns and is claimed to prevent jet lag. Its use is controversial, so check with your doctor.

At your destination

Take a nap for 1–2 hours if possible.

Wander around until you are tired and go to bed at the usual time. It is good to have a full day's convalescence and avoid big decision-making soon after arrival. Allow about 3 days for adjustment after the London to Australia flight.

Who is fit to fly?

Patients with these problems should avoid flying:

- upper airways congested by infection, including influenza
- severe respiratory disease (emphysema, chronic bronchitis, pneumothorax)
- unstable heart failure
- severe anaemia (below 70 g/L)
- pregnancy beyond 200 days (28 weeks)
- previous violent or unpredictable behaviour
- within 4 weeks of a myocardial infarction (coronary or heart attack)
- within 14 days of a cerebrovascular accident (stroke)
- within 14 days of major surgery
- brain tumour or recent skull fracture
- recent eye surgery

Special precautions are required by travellers with:

- *Colostomy*: Patients should wear a large colostomy bag and take extra bags.
- *Varicose veins*: Wear supportive stockings and exercise frequently.
- *Plaster casts*: Those with broken limbs in plaster should be careful of swelling.
- *Pacemakers*: Those with pacemakers may have a problem with X-rays at some overseas airports. Mention it to officials before passing through security equipment.
- *Epilepsy*: Medication should be increased on the day of travel.
- *Diabetes*: Diabetics should discuss their therapy and control with their doctor.

Travel: guide for travellers

Travellers to countries that have low standards of health and hygiene risk contracting infectious diseases. Most problems are caused by contaminated food and water and by mosquitoes, which transmit malaria, yellow fever, dengue and Japanese encephalitis.

Prevention is better than cure; the advice that follows is designed to minimise the chance of contracting a serious disease while travelling overseas.

Food and drink

Diseases that can be picked up from eating and drinking contaminated food include travellers' diarrhoea, hepatitis A, cholera and typhoid.

While visiting countries at risk, drink only boiled water and reputable commercially bottled beverages. Avoid ice, dairy products, salads, uncooked foods, ice-cream, raw seafood, shellfish and food from street vendors.

You can purify water by boiling it or adding iodine tablets.

Vaccinations

Important recommended vaccinations are shown in the table. Your doctor will advise you on which vaccinations you will need. Other diseases to consider are rabies and typhus.

Malaria

One sting from an infected mosquito can cause serious illness. Malaria is common in many African, South American and South-East Asian countries. To prevent malaria, protect yourself from mosquitoes and take antimalarial drugs prescribed by your doctor.

Avoid rural areas after dusk. Use insect repellents that contain diethyltoluamide (such as Rid or Repellem). Wear protective light-coloured clothing with long sleeves and legs, and sleep in screened rooms or use mosquito nets. Avoid using cologne, perfume and aftershave.

Antimalarial drugs should be taken before exposure and up to 4 weeks after exposure to give maximum protection.

Malaria that resists drug treatment with chloroquine occurs in many countries. Your doctor will prescribe another drug as well as or instead of the usual chloroquine if you are at risk of exposure to this type of malaria.

Drugs cannot guarantee 100% protection. If you develop an unexplained fever, sore throat or severe rash, seek medical advice.

Your destination

Different countries have different vaccination requirements. For advice about the country you intend to visit, contact your own doctor.

Diarrhoea

There are several ways to relieve and treat travellers' diarrhoea:

1. Avoid solid foods and drink small amounts of fluids often. (Remember: use only boiled water or safe commercial beverages.)
2. Rest.
3. Take antidiarrhoeal tablets as directed (for mild cases).
4. When the diarrhoea has settled, eat light foods such as rice, bread or biscuits.

Some golden rules

- Never carry a parcel or baggage to oblige a stranger.
- Avoid casual sex. If not, use a condom.
- 'If you can't peel it, boil it or cook it, *don't eat it*.'
- Never walk around barefoot at night in snake-infested areas (and use a torch).
- Prevent mosquito bites.

A guide to vaccination for travellers for important diseases (in rural areas of high risk countries)

Vaccination	Duration	Comments
Tetanus	10 years	Essential for travelling.
Diphtheria	10 years	Essential for travelling.
Polio	10 years	Essential for travelling.
Yellow fever	10 years	Compulsory if visiting certain central African or South American countries.
Cholera	3 months	Not recommended by WHO; still required if epidemic.
Typhoid	2–3 years	Recommended for all developing countries.
Hepatitis A	varies	Might be advisable if you are visiting rural developing countries: ask your doctor.
Hepatitis B	5 years	
Tuberculosis	life	
Measles	life	
Meningococcus	3–5 years	Consider for visits to endemic areas if in close contact with locals.
Japanese encephalitis	1–4 years	Consider in certain Asian countries for trips longer than 12 months or during an epidemic.
Rabies	1 year	Recommended for long stays in high risk areas.

Tremor: essential tremor

What is essential tremor?

It is a tremor that mainly affects the hands and head and possibly the voice and legs. It can come on at any age.

It is also called *juvenile tremor* (if it comes on in children), *senile tremor* (if it comes on in the elderly), *benign tremor* (because it is not serious) and *familial tremor* (because it tends to run in families).

Is it similar to Parkinson's disease?

Essential tremor often gets confused with Parkinson's, but it is different in that it is most marked when the arms are held out while the tremor of Parkinson's is most marked with the hands resting and tends to disappear when the hands are used to do things. Walking is normal with essential tremor but abnormal with Parkinson's.

What are the symptoms of essential tremor?

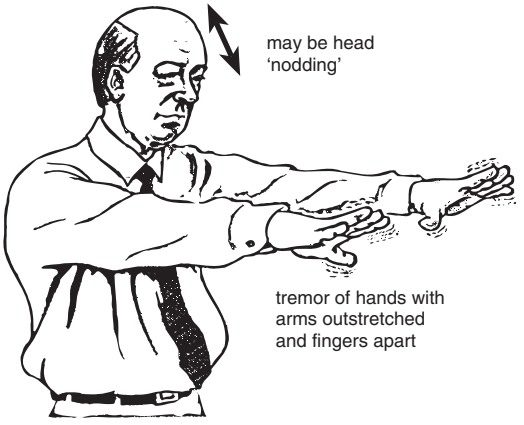
- A slight tremor begins in one hand and then spreads to the other.
- The tremor may also affect the head, chin, tongue and only rarely the legs.
- The head tremor has a 'yes–yes' nodding action but can also have a 'no–no' shaking action. It can be stopped by supporting the head.
- It interferes with writing and handling cups of tea, spoons and other objects.
- Anxiety makes the tremor worse.
- Alcohol tends to make it better.
- Some cases are so mild that it is not diagnosed while in others it can be quite severe.

Who gets essential tremor?

It is a relatively common problem (affects about 4 per 1000) and has a tendency to run in families. It can come on at any age, although it usually comes on in early adulthood, even in adolescence.

What is the cause?

The cause is not exactly known, but certain chemicals that transmit nerve impulses are thought to be present in smaller quantities than normal.



Symptoms of essential tremor

Does it need special investigation?

Special expensive investigations are not necessary and are not likely to show up any abnormality. Essential tremor can be usually diagnosed upon observation.

What are the risks?

Essential tremor is not a serious illness and most people cope normally throughout life without any disability, even if it comes on in childhood. Very rarely some patients can become disabled and surgery may be needed to help them.

What is the treatment?

Explanation and reassurance

Because most patients cope with essential tremor throughout life, reassurance and education about the tremor are all that are required. Medical treatment is usually unnecessary.

Alcohol

Although alcohol helps those with faster tremors, it is not advisable to use it as a treatment. It should be used in moderation only.

Medication

In some patients the tremor can be socially embarrassing, especially when they are very anxious. The beta-blocking drug propranolol can be used with good effect in these patients. There are also other drugs that can be effective.

Tubal ligation

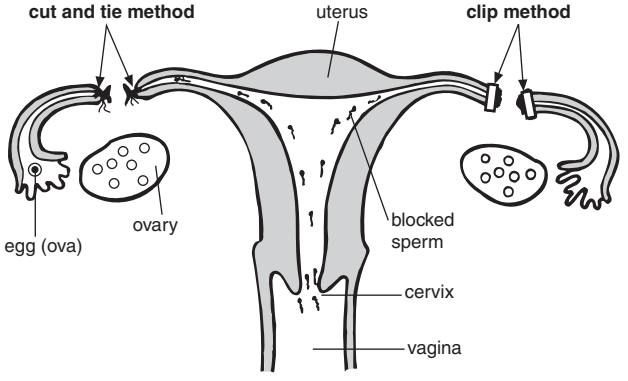
What is tubal ligation?

Tubal ligation is a sterilisation operation in which the Fallopian tubes are cut off or blocked. This stops the sperm reaching the egg in the tube, which is the normal site of fertilisation.

How is the operation done?

Tubal ligation is usually done under a general anaesthetic. It is necessary to get inside the abdomen. This is done by one of several methods, most commonly by a small cut just above the pubic hair line or through a special tube called a *laparoscope*. In the laparoscopic method the tube is passed through a small cut about 1cm long made just below the navel, and the tubes are located through a powerful light system. Rings or clips can be attached to the two tubes or the tubes can be burnt (*cauterised*) and the ends tied off. The ring or clip method makes reversal easier if necessary later on.

In other methods the surgeon picks up each tube through the wound, removes a section of tube and ties the ends.



Tubal ligation

How long is the hospital stay?

This is usually 1–2 days, depending on the operation method and the policy of the hospital.

How effective is tubal ligation?

It is very effective, but failures do occur in about 1 in 200 operations. Some methods have a better success rate than others.

Does tubal ligation affect sexual function?

A normal sex life can resume once the effect of the operation is over. Many women find that their sex life is better without the worry about getting pregnant.

Does tubal ligation affect menstruation?

Menstruation continues as usual, but some women report that their periods are heavier, especially if large pieces of tube are removed. However, the modern laparoscopic methods do not appear to cause heavier menstruation.

Does tubal ligation cause weight gain?

No, it does not cause weight gain because it has no effect on hormones or appetite.

Can sterilisation be reversed?

The cut tubes can be rejoined by microsurgery, but there is no guarantee of regaining fertility. The successful pregnancy rates vary between 30 and 80%, depending on the technique used. The simple clip method gives a better chance of reversal.

Tubal ligation, however, should be regarded as permanent and irreversible and not entered into lightly.

Umbilical hernia

Umbilical hernias are very common in babies.

What is an umbilical hernia?

It is a bulge of soft tissue covered by skin in the *umbilicus* (navel) of a baby. It is the site where the blood vessels in the umbilical cord joined mother to baby.

What are the symptoms?

The hernia rarely causes any problems to the baby. Parents may be concerned when the hernia bulges further with crying.

What are the risks?

Because the opening is wide, there is hardly any risk of strangulation.

What happens normally?

The hernia gradually becomes smaller as the baby grows and the hole becomes smaller. Most hernias have disappeared within 12 months, while the larger ones usually disappear by the age of 4. If the hernia has not disappeared by the age of 4, a minor operation to remove it may be necessary.

What is the treatment?

No special treatment is required and the hernia is left to settle naturally. The old-fashioned method of taping a coin over the lump is not necessary and is not advised.

The operation

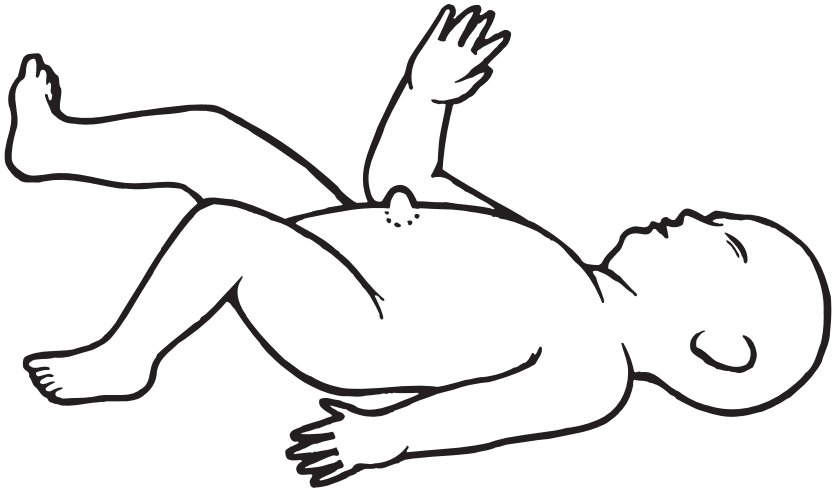
If the hernia is still present at 4 years, surgery is advisable. The operation involves simply placing a stitch (rather like a purse string) in the hole to close it over. The scar will hardly be noticeable and is usually invisible in adults.

There are no stitches to be removed afterwards. The child comes in as a day patient and will not have to stay overnight under normal circumstances. Children cope and recover much better than do adults with these operations and will be able to carry on with their normal activities the day after the operation.

Key points

Umbilical hernias:

- are common in infants
- do not require treatment
- usually go away by 4 years of age
- can be corrected by a simple operation if necessary



Umbilical hernia

Understanding the adolescent

Adolescence is a difficult period in which the young person is trying to cope with the inner conflict of striving for independence while still relying on adult support. There are inevitable clashes with parents, especially during the turbulent years of 13–16.

What are the hallmarks of the adolescent?

- self-consciousness
- self-awareness
- self-centredness
- lack of confidence

These basic features lead to anxieties about the body, and so many adolescents focus on their skin, body shape, weight and hair. Concerns about acne, curly hair, round shoulders and obesity are very common.

There are usually special concerns about boy–girl relationships and maybe guilt or frustration about sexual matters. Many adolescents therefore have a lack of self-worth or a poor body image. They are very private people, and this must be respected. While there are concerns about their identity, parental conflict, school, their peers and the world around them, there is also an innate separation anxiety.

What are the needs of adolescents?

- 'room' to move
- privacy and confidentiality
- security (e.g. stable home)
- acceptance by peers
- someone to 'lean on' (e.g. youth leader)
- special 'heroes'
- establishment of an adult sexual role
- at least one really good personal relationship

How does rebelliousness show?

It is quite normal for normal parents and normal teenagers to clash and get into arguments. Adolescents usually have a suspicion of and rebellion against convention and authority (parents, teachers, politicians, police and so on). This attitude tends to fade after leaving school (at around 18 years of age).

Common signs are:

- criticising and questioning parents
- putting down family members or even friends
- unusual, maybe outrageous, fashions and hairstyles
- experimenting with drugs such as nicotine and alcohol
- bravado and posturing
- unusual, often stormy, love affairs

Signs of out-of-control behaviour are:

- refusal to attend school
- vandalism and theft
- drug abuse
- sexual promiscuity
- eating disorders: anorexia, bulimia, severe obesity
- depression

Note: Beware of suicide if there are signs of depression.

What should parents do?

Wise parenting can be difficult, because one cannot afford to be overprotective or too distant. A successful relationship depends on good communication, which means continuing to show concern and care but being flexible and giving the adolescent 'space' and time.

Authoritative parenting

This approach is widely regarded as important to provide security during the transition to adulthood. It involves being firm and demanding of mature responsible behaviour while still being warm and nurturing. It also involves challenging moodiness gently, challenging negative thinking, encouraging positive social skills and dealing with conflicts constructively.

Important management tips are:

- Treat adolescents with respect and love.
- Be non-judgmental.
- Stick to reasonable ground rules of behaviour (e.g. regarding alcohol, driving, language).
- Do not cling to them or show too much concern.
- Listen rather than argue.
- Listen to what they are *not* saying.
- Be flexible and consistent.
- Be available and responsive to help when requested.
- Give advice about diet and skin care.
- Talk about sex and give good advice, but only when the right opportunity arises.
- Know the right questions to ask and where to seek help in a crisis.

Healthy distraction

Most authorities say that the best thing to keep adolescents healthy and well adjusted is to be active and interested. Regular participation in sporting activities and other hobbies such as bushwalking, skiing and so on with parents or groups is an excellent way to help them cope with this important stage of their lives.

> **Remember**
>
> Adolescent problems are a passing phase. Some authorities say it ends at 18 or 19, while others claim the 'age of reason' is reached at 23 or 24!

Understanding your menstrual cycle

What is the menstrual cycle?

When we talk about the *menstrual cycle* the first thing many of us think of is 'periods'. The period (*menstruation*) is just part of a continuous cycle of changes in the body that is regulated by hormones.

The cycle usually begins during the teenage years and continues until the menopause, at about the age of 50. The purpose of the menstrual cycle is to prepare the body for reproduction.

What is the normal cycle?

The menstrual cycle can vary from woman to woman. For some it is normal to have a shorter cycle (e.g. 21 days) and for others a longer cycle (e.g. 35 days). The average for all women in the world is 28 days.

This means that the time of ovulation varies, but the average is the 14th day.

The periods can last from 1 to 8 days, with the average being about 4–5 days.

What causes irregularity of the periods?

The cycle will vary in a woman from time to time. This can be the result of emotional stress, illness, travel, sudden weight change or the use of some medicines.

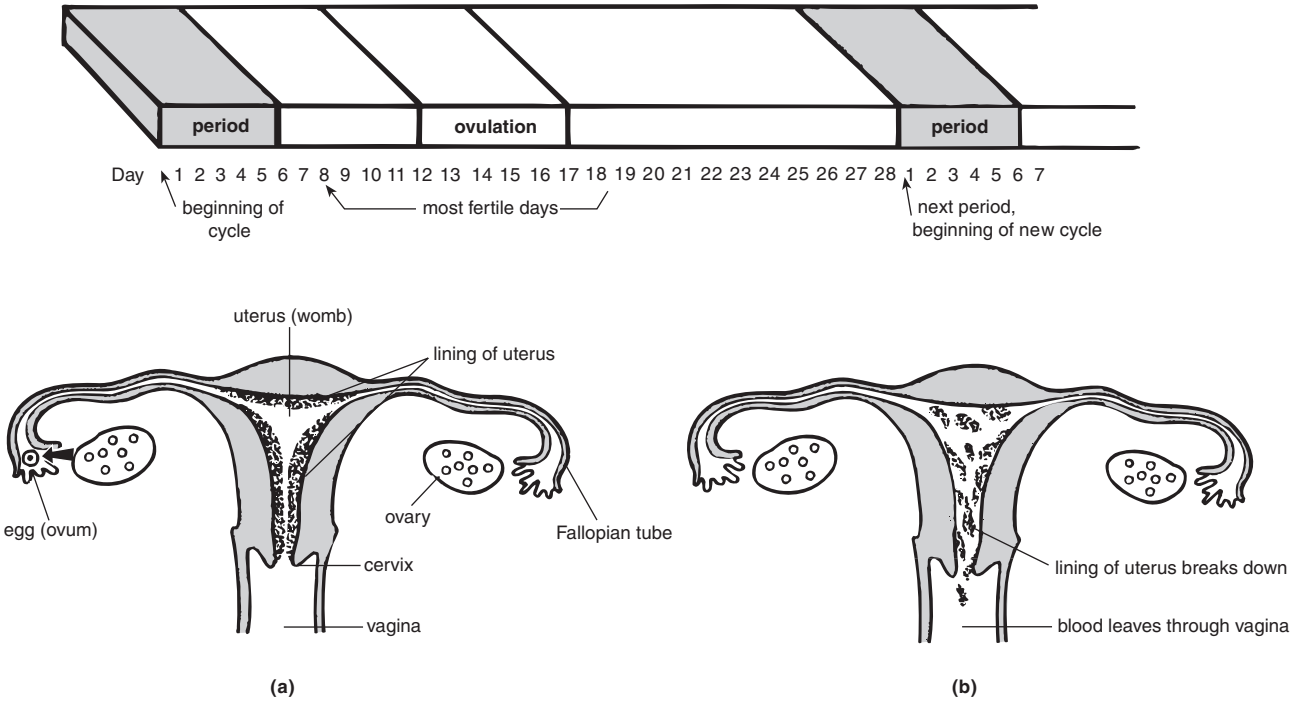
What are some of the problems?

Many women will experience problems with their menstrual cycle at some time. The commonest problems are period pain, premenstrual tension, irregular periods and very heavy periods.

If you have any problems or questions about your menstrual cycle, discuss them with your doctor.

When is pregnancy likely to occur?

You are most likely to get pregnant between the 8th and the 18th day, depending on when you ovulate and how long the sperm remain active. It is useful to know when you ovulate—you may feel a pain in the abdomen and notice that your vaginal mucus changes from jelly-like to watery. Intercourse at this time and for the next 2 days is most likely to cause pregnancy.



(a) Ovulation

- *Ovulation occurs usually from day 11 to 17 (average day 14)*
- *Up to this time the hormones have been preparing the lining of the uterus to receive the embryo if the egg is fertilised*
- *This lining gets thick and full of blood*

(b) Menstruation

- *If fertilisation (pregnancy) does not occur, the lining of the uterus is no longer required*
- *It is shed through the vagina*
- *This is called the menses*

Urticaria (hives)

What is urticaria?

Urticaria, also known as *hives*, is a common allergic disorder in which a red, itchy, lumpy skin rash appears 'out of the blue'. These skin lumps, which are known as *weals*, can develop anywhere on the body, including the palms and soles. The weals, which have pale centres and red margins, can spread out and join up to form large irregular patches. They are usually about 1–5 cm across. These weals can rapidly change shape and come and go over a period of minutes or hours. Urticaria can be *acute* in onset (in which the cause is often known and the disorder settles within 6 weeks) or *chronic* (where it lasts longer).

Who gets urticaria?

Urticaria can affect any person at any age. One out of every 5 people will have an attack at some stage in their lives. The allergy can be present at birth or develop slowly over many years or appear suddenly on exposure to the allergens.

What causes urticaria?

Urticaria is a type of allergy resulting from a release of a chemical called *histamine*. The cause of this histamine release is often unknown, but common causes are foods, drugs and infestations. Sometimes the cause is very obvious, such as when urticaria appears minutes after eating.

Check list of possible causes

- foods: eggs, nuts especially peanuts, shellfish, other fish, cheese, oranges, chocolate, caffeine, strawberries and others
- food colourings (e.g. tartrazine)
- drugs: penicillin, sulpha antibiotics, aspirin, codeine, vaccines and others
- insect bites: bees, wasps, sandflies, fleas, mosquitoes and others
- azo dyes
- plants: nettles, poison ivy and others
- animals: cats, horses and others
- infection: viral, bacterial or fungal
- cosmetics and perfumes
- infestation: parasites
- exposure to heat and cold
- over-exposure to sunlight
- underlying chronic disease (e.g. lupus, lymphoma)
- pregnancy (last trimester)

> **Note**
>
> Tension and stress usually make urticaria worse.

What is angio-oedema?

This is a serious form of urticaria in which the face, especially the lips and skin around the eyes, suddenly swells. It can be serious if the throat swells. You should contact your doctor immediately if this develops.

How is the cause found?

You may be asked to keep a food diary and note any associations. You may also have to undergo patch testing of your skin to find out what you may be allergic to.

What is the treatment?

- Antihistamines, usually taken by mouth, are used to relieve the rash and itching. Cortisone may be used for more severe cases. Avoid taking aspirin or other drugs not prescribed for you.
- Itching can be relieved by daubing with calamine lotion.
- Cold water compresses such as soaking a towel in cold water can also relieve itching. Avoid hot baths or showers during the acute phase—keep it cool!
- Decrease your activity during the acute phase. It is better not to get hot and sweaty.
- Avoid alcohol and caffeine-containing drinks, especially if there is a possibility of these being a trigger factor.

> **Call for urgent attention if you:**
>
> - have problems breathing
> - have angio-oedema especially swelling of tongue and throat
> - are choking
> - have pale and sweaty skin
> - are faint and dizzy

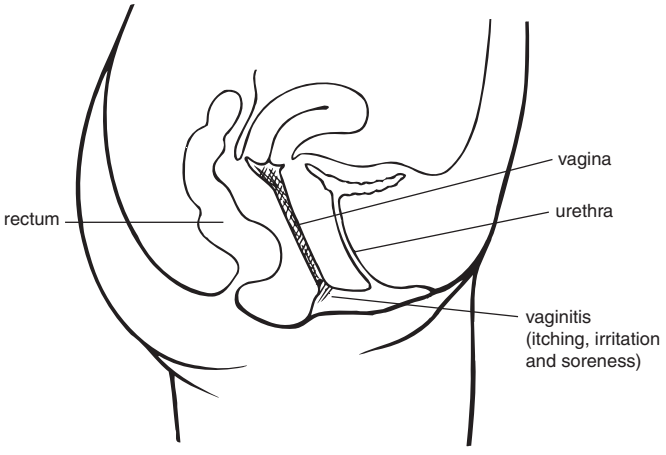
Vaginal thrush

Vaginal thrush, sometimes called 'monilia' or a 'yeast' infection, is a common condition caused by an overgrowth of the micro-organism *Candida albicans*.

What are the symptoms?

Symptoms around the genital area

- itching
- irritation
- soreness
- swelling of the vaginal opening



The extent of vaginal thrush

Other symptoms

- cheesy-white discharge
- discomfort during intercourse
- pain when urinating
- unpleasant odour (possibly)

What is the cause?

Candida is one of a large number of organisms present in the vagina all the time. These organisms do no harm until something upsets their normal balance (and sometimes that trigger factor is not obvious).

Factors likely to cause vaginal thrush

- diabetes
- treatment with antibiotics or cortisone
- pregnancy

Factors that might cause vaginal thrush

- intercourse
- oral contraceptives
- an IUD (intrauterine device)
- tight-fitting jeans
- nylon underwear
- leaving on a wet bathing suit after swimming
- humid weather
- travel (due to prolonged sitting)
- obesity

What is the treatment?

- See your doctor about a vaginal cream or pessary to insert high up in the vagina.
- Bathe the genital area gently 2 or 3 times a day to relieve the discomfort and itching. Use 1 tablespoon of bicarbonate of soda in 1 litre of warm water.
- Dry the genital area thoroughly after showering or bathing.
- Wear loose-fitting cotton underwear.
- Avoid having intercourse while you have thrush.
- Sometimes tablets to take by mouth are prescribed.

Should my partner be treated?

This is a controversial issue but is not recommended as there is no proven benefit from treating your partner.

How is it prevented?

- Wash and thoroughly dry the genital area at least once a day.
- Do not wear panty hose, tight jeans or tight underwear or use tampons. (*Candida* thrives in warm, moist, dark areas.)
- Do not use vaginal douches, powders or deodorants.
- Follow a healthy lifestyle.

What should you do if the infection keeps returning?

- Are you taking antibiotics? Ask your doctor's advice about the thrush.
- If you are using oral contraceptives, you might have to change to another form of contraception.
- See your doctor about checking your urine for sugar (diabetes) or another infection.

Varicose veins

What are varicose veins?

They are twisted and swollen veins caused by faulty valves in the system of veins in the leg. The failure of the valves to close properly causes blood returning to the heart to pool in the veins.

How do they form?

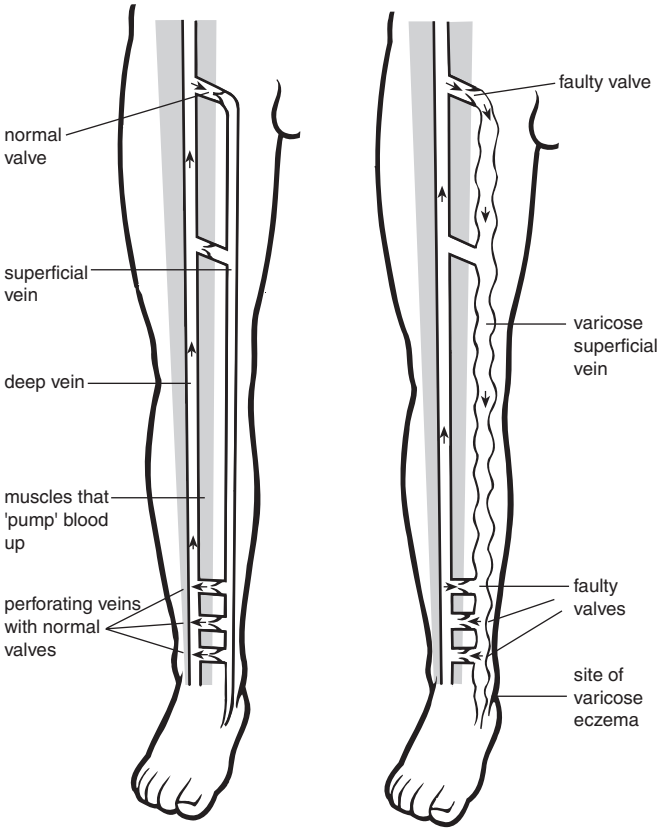
Blood is collected from the leg in a network of superficial veins (just under the skin, on the surface of muscles). These veins are connected with deep veins in the muscles by perforating veins. When the muscles of the leg contract they pump the blood up these veins, which have one-way valves to prevent blood flowing back into the superficial veins.

When the valves do not close properly the blood tends to flow into the superficial veins, causing them to swell with the 'pooled' blood.

There are two main types of faulty systems:

1. faulty valves in the groin, which cause the typical long knobbly veins along the leg
2. faulty valves in the perforating veins, which cause problems mainly around and above the ankle

The latter problems are the more troublesome.



Normal veins *Varicose veins*

What are the symptoms?

The usual first sign is the appearance of prominent bluish swollen veins in your leg when you stand up. The usual site is either at the back of the calf or the inside of the leg from the ankle to the groin. At first they are not painful, but as the veins get larger they may become tender to touch and the skin above them or at the ankle may begin to itch.

With severe varicose veins the whole leg may ache and the skin, especially at the ankle, may become brownish. This discoloured skin is called *varicose eczema*.

What are the risks?

Varicose veins are usually annoying and unsightly rather than disabling. Serious complications include the development of an ulcer in the skin (usually after an accident), inflammation of the vein or a clot in the vein.

Sometimes a knock or cut over a vein can cause severe bleeding. If this happens, put your leg up above your body and wrap a firm bandage around the bleeding vein.

What is the treatment?

Self-help

- Keep off your feet as much as possible.
- Whenever possible, sit with your legs up on a footstool.
- Buy or get a prescription for support tights or stockings and put them on before you get out of bed every day.
- Do not scratch itchy skin over your varicose eczema.
- See your doctor if you develop eczema or an ulcer.

Surgery

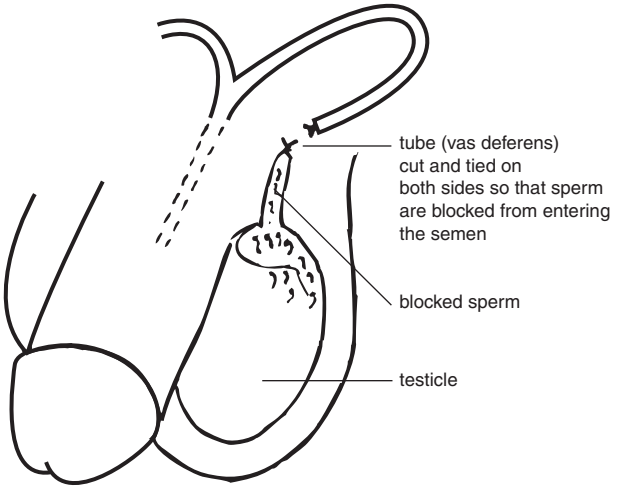
The most satisfactory answer to the problem of varicose veins is through surgery. The operation generally has good results, as the veins with the faulty valves are tied off or stripped away. It is possible to operate without leaving large scars.

After surgery varicose veins tend to come back, usually in a different place, in about 10% of treated patients.

Vasectomy

What is vasectomy?

Vasectomy, which is the commonest method of sterilisation in men, is an operation in which the two 'vas' tubes (the *vas deferens*) are cut and tied. This blocks the flow of sperm from the testicles into the penis, so that when the man ejaculates the semen does not contain sperm.



How is the operation done?

This simple operation, which can be performed under a local or a general anaesthetic, usually takes about 30 minutes. It is done through two small cuts in each side of the scrotum (bag) or through one cut in the middle. The 'vas' tube, which lies just below the skin, is picked up and cut. About 1 cm of it is removed; the ends are tied off and then cauterised with a hot needle.

How effective is a vasectomy?

Vasectomy is reliable because every precaution is taken to separate the tubes so that they do not rejoin. Despite this, about 1 in 500 vasectomies fail because the tubes somehow manage to rejoin.

Is the man sterile immediately?

No. It takes about 20 ejaculations to clear all the sperm from the tubes above the cut. About 2–3 months after the operation it is necessary to have one or two (preferably two) sperm counts to make sure that the semen has no sperm. The semen has to be collected by masturbation and examined under a microscope.

Does vasectomy affect sexual function?

No. It makes no difference to a man's sex drive and performance. Some say that their sex life is improved because the worry about contraception is removed. Despite the absence of sperm in the semen, the fluid ejaculated seems normal because most of it is produced high in the tubes at the base of the penis.

Normal sexual activity can be started 7–8 days after vasectomy, but it is important to continue some form of birth control until the sperm count is zero.

What happens to the sperm?

Sperm are still produced in the testicles but lie around in the blocked tube for about 3 weeks before shrivelling up and being absorbed into the body in a similar way to blood after a bruise. Sperm only make up about 1% of the fluid ejaculated.

What are the side effects of vasectomy?

Bruising and swelling are common problems but settle after about 2 days. Bleeding and infection occur sometimes, but they settle quickly with treatment. A small lump caused by a build-up of sperm can develop at the operation site: these sperm *granulomas* usually settle themselves.

Can vasectomy be reversed?

The cut tubes can be rejoined by microsurgery, but there is no guarantee of regaining fertility. As a general rule about 40% of vasectomy reversals lead to successful pregnancy.

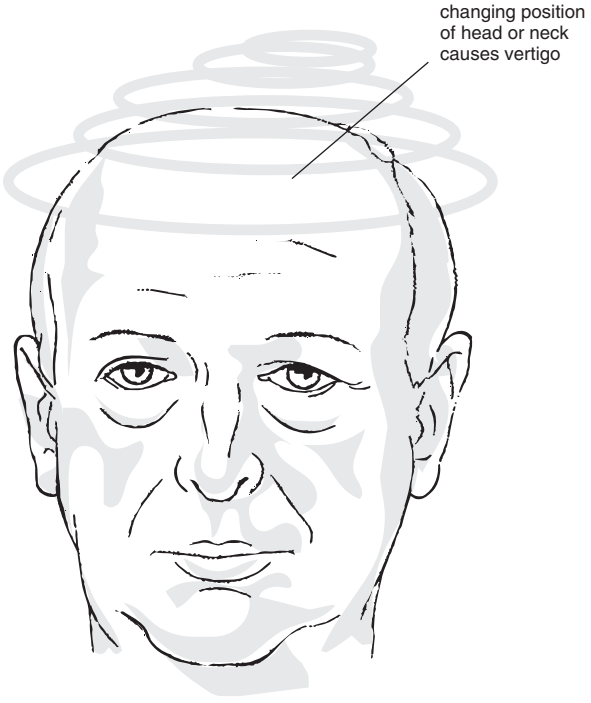
Vasectomy should be regarded as permanent and irreversible.

It is important to be definite about the decision to have the operation and not to have it under pressure.

Vertigo: benign positional vertigo

What is benign positional vertigo (BPV)?

BPV or *positional vertigo* is a spinning sensation of the head (*vertigo*) brought on by a certain position of the head, usually sudden changes of position. The word 'benign' means that it is not a serious condition and is likely to eventually get better.



What is the cause of BPV?

In most people the cause is unknown, but it can follow accidents causing neck or head injuries in some people.

There are two theories to explain BPV:

1. A problem exists in the neck, usually a 'kink' in some of the swivel joints of the neck. The neck is connected to the balance centre by special nervous pathways.
2. There are tiny pieces of floating debris in the balance centre of the inner ear (the *labyrinth*). These little bits of sediment somehow upset the balance centre when disturbed.

What are the symptoms?

- a brief attack of severe dizziness (vertigo), usually for about 10–30 seconds, that comes on a few seconds after a certain head movement
- quickly subsiding dizziness

The changing head positions that provoke an attack can be:

- tilting the head backwards
- changing from a lying to a sitting position
- lying on one ear or the other
- turning the head to the side with the neck injury

Who gets BPV?

Although it can occur at all ages, the elderly are affected most. It is the commonest cause of vertigo in the elderly. Women are twice as likely as men to get it. BPV is a surprisingly common problem.

How long do the bouts of BPV last?

Each attack usually lasts less than 30 seconds but can last 60 seconds or so. The attacks tend to come in bursts but usually settle within a few weeks and most people are able to return to work within a week. The bouts tend to come back after months or years, but some people only ever have one attack.

What are the effects of BPV?

There are usually no ill effects in the long run. Unlike some other causes of severe dizziness, there is usually no vomiting, tinnitus (ringing in the ears) or deafness. The affected person has to be careful with driving.

What is the treatment?

There is no special treatment. Drugs are not effective at preventing the attacks. It is basically a matter of allowing the bouts to run their course, but there are some things that may help:

- Avoid head positions that provoke the attack.
- Do special neck exercises.
- Obtain mobilisation treatment to the neck by a qualified therapist.

Sometimes it may be necessary to be referred to a specialist to make sure it is just BPV and not a problem with the circulation to the brain.

Vertigo: exercises for benign positional vertigo

This set of exercises, called the *Brandt & Daroff exercises*, is used to treat the disturbing problem of benign positional vertigo. They are specifically designed to treat those cases in which the cause is considered to be clumps of debris (like fine sediment) collecting in one of the canals of the inner ear. The exercises disperse this debris away from the delicate balance membrane.

Rules

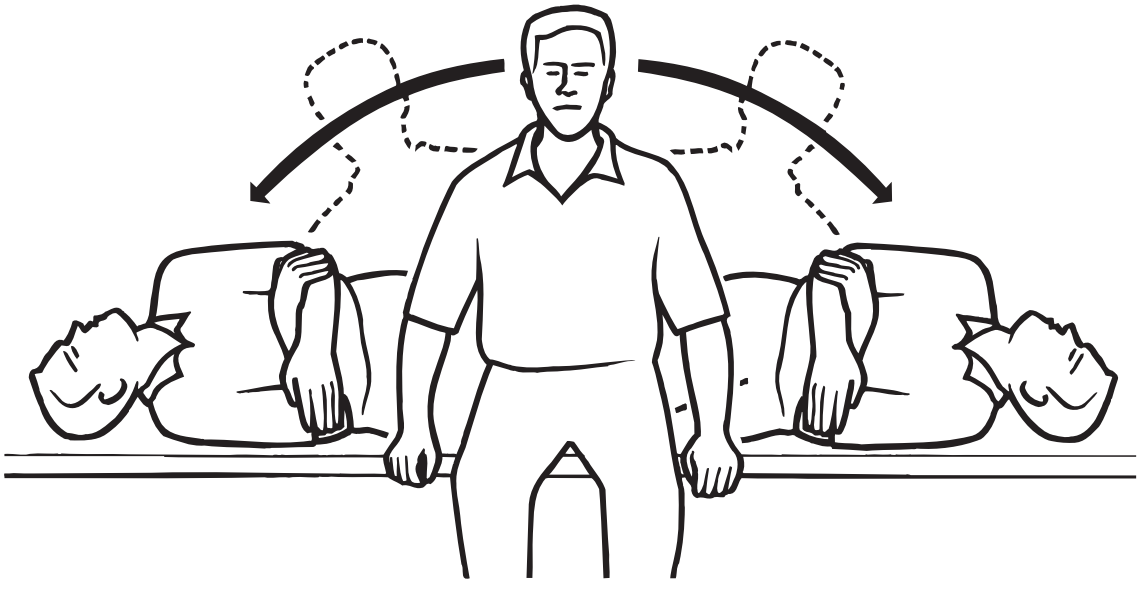
- Perform 3 times daily (if possible).
- Take about 10 minutes each time.
- Usually do 5 or more times to each side.
- They are beneficial only if dizziness is reproduced.
- Take anti-sickness tablets if nausea is a problem.

Method

1. Sit on the edge of bed; turn your head slightly to the left side (about 45°). Lie down quickly on the right side (ensure the back of the head rests on the bed). Wait for either 20–30 seconds or for any dizziness to settle.
2. Sit up straight.
   Wait for 20–30 seconds or for any dizziness to settle.
3. Repeat on the other side: turn the head slightly to the right side before lying down quickly on your left side.

Note:

- It doesn't matter on which side you lie down first.
- Turn your head away from the side on which you lie down.
- It is important to reproduce dizziness with the exercises.
- If the exercises are done regularly, the symptoms should settle over a period of several days but this may vary from 3–4 days to weeks.



Exercises for benign positional vertigo

Viral infection

What is a viral infection?

Viral infections are caused by *viruses*, which are microscopic germs and are quite different to the larger bacteria germs. They look like tiny crystals under the microscope. They are the commonest cause of infection, but are usually not serious. We eventually get over the infection simply by resting and looking after any troublesome symptoms.

What are examples of viral infections?

They usually cause upper respiratory tract infections (URTIs) such as the common cold and pharyngitis (sore throat). Other examples are influenza, gastroenteritis (especially in children), measles, rubella, mumps, chickenpox, glandular fever and cold sores.

What are the typical features?

- The illnesses are bothersome, but usually not serious.
- Symptoms include feeling unwell, fever, aches and pains (including headache).
- The illness is 'self-limiting'; that is, it gets better naturally.
- The body builds a defence by producing antiviral antibodies.
- Normal routine antibiotics have no effect on the outcome.
- Serious complications are rare, but dehydration can be a special problem in children and we have to watch out for encephalitis (inflammation of the brain) with some viruses (such as mumps and measles).

What is the treatment?

- *Rest* to allow the body to shake off the virus.
- Take *analgesics* (paracetamol or aspirin) for fever and aches or pains. Give paracetamol to children.
- *Take adequate fluids*, especially children. Use clear fluids such as water.
- Use *decongestants* for URTIs.

Why not give antibiotics?

Routine antibiotics do not help viral infections. Bacterial infections are generally more serious and are cleared up by antibiotics.

However, bacteria can attack the affected vulnerable parts of the body during a viral infection and cause problems such as middle ear infection, sinusitis, bronchitis, pneumonia and skin infection. You or your doctor may notice a yellowish-green nasal discharge or sputum, pus in the middle ear or throat. Antibiotics may be prescribed to treat this secondary bacterial infection.

When should you contact your doctor?

Contact your doctor if any of the following occur:

- no improvement in condition or worsening after 48 hours
- refusal of a child to drink
- persistent vomiting
- difficulty in breathing
- persistent headache
- complaints that any light hurts the eyes
- neck stiffness
- paleness and drowsiness
- pain not relieved by analgesics
- pus-like discharge from the ear, nose or skin, or in the sputum

Viral skin rashes in children

What are viral skin rashes?

A *viral skin rash* is an acute outbreak of a red rash on the body. The rash is part of the illness associated with a generalised viral infection.

In the past, a red rash in a child was usually due to one of the 'big three'—rubella virus, measles virus or scarlet fever. Now the rashes are commonly caused by other viruses.

What are the effects on the child?

The rashes described here—not measles, rubella (German measles) or scarlet fever—are usually mild and do not cause any distress to the child. The rash usually lasts for a few days before disappearing without any ill effects.

Apart from having the rash, the child may feel unwell with fever and display a lack of interest and loss of energy. Sometimes diarrhoea and a snuffly nose can occur.

What are the risks?

Complications of these infections are very rare in healthy children and almost always the problem is mild. Most children go about their normal play as though nothing is wrong. Febrile convulsions can occur with high fever.

Is the problem contagious?

These virus illnesses are mildly contagious, especially *fifth disease* (slapped face syndrome), which can occur in outbreaks at schools and among members of the same family. The virus usually spreads from person to person by close contact, mainly by the breath.

What are the main types?

There are three main types, which are simply called *fourth*, *fifth* and *sixth disease*. The term 'disease' is not a good one, as they are not really diseases.

Fourth disease

This common problem can be caused by a number of viruses, especially those affecting the bowel. The rash is so much like rubella that it is often misdiagnosed as rubella. However, unlike rubella, it is not concentrated on the face and neck. It mainly occurs on the trunk (body), is usually not itchy and often fades after 2 days. It tends to occur in pre-school children.

Fifth disease

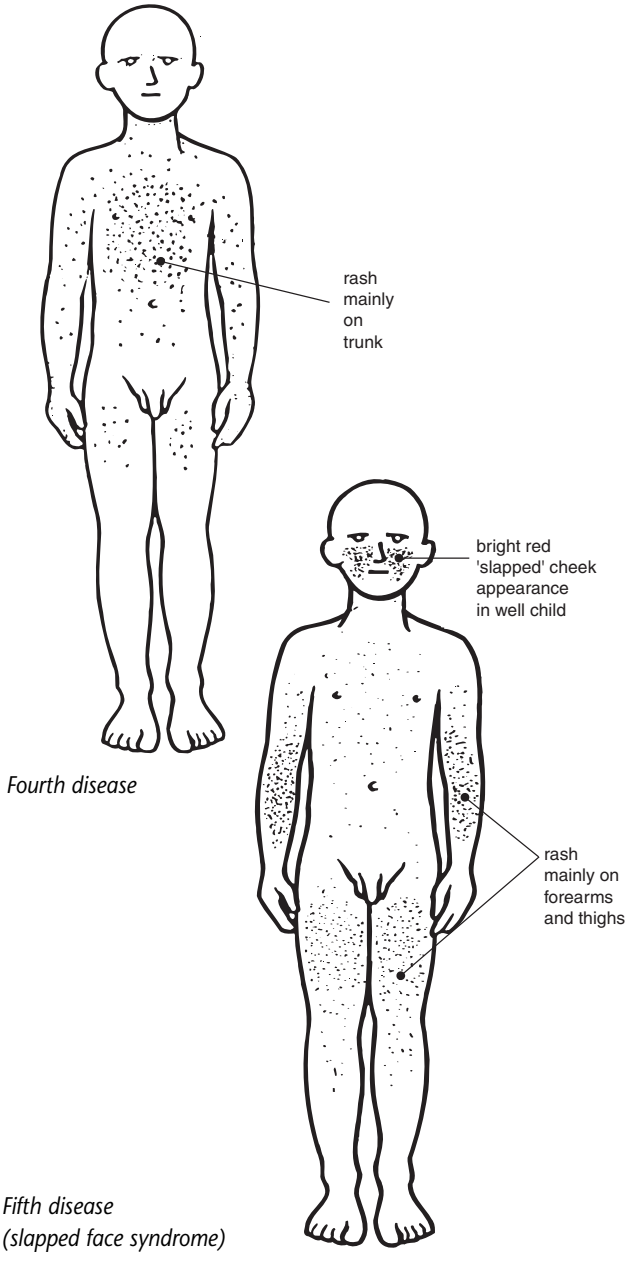
This is an interesting problem, and is also called *erythema infectiosum* or *slapped face syndrome*. It is caused by parvo virus B19. A bright red rash appears on the face first (giving a slapped face appearance), and then after a day or so appears on the arms and legs. The rash lasts for only a few days but may recur on and off for a few weeks. It is a mild illness but can have serious effects on the foetus if acquired during pregnancy. The infection usually occurs in young school-aged children.

Sixth disease

Sixth disease (also known as *roseola infantum*) usually affects infants at the age of 6–24 months. It has a classic feature in that the child develops a high fever and runny nose and as soon as the fever settles a bright red rash appears, mainly on the trunk. It is uncommon on the face and limbs. The rash lasts only about 2 days. Sixth disease appears to be a common cause of febrile convulsions.

What is the treatment?

Treatment is very simple. Give paracetamol for the fever. The rash does not require any special treatment as it tends to fade rapidly. If the rash appears to cause discomfort, soothe the child with a tepid bath with Pinetarsol or sodium bicarbonate (half a cup to the bath water). Get the child to drink lots of fluids.



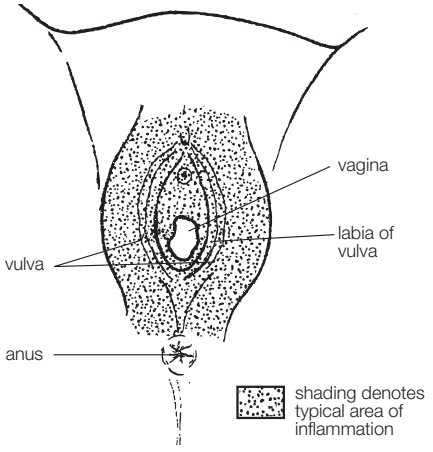
Fourth disease

Fifth disease (slapped face syndrome)

Vulvovaginal irritation in children

What is vulvovaginitis?

Vulvovaginitis is inflammation of the skin of the external genital region in women. It is a type of dermatitis that involves the vulva (the soft genital area that surrounds the vagina) and also the vagina itself. It can be regarded as a type of mild infection which is referred to as a non-specific infection because there is usually no specific responsible bug, including thrush.



Vulvovaginitis in children

Vulvovaginitis can affect women of any age but it is particularly common in young pre-pubertal girls, especially between the ages of 2 and 8 years. The skin of the vulva and vagina is thin and poorly developed at this age and is susceptible to the action of bugs (germs) from the skin and the anus.

What is the cause of vulvovaginitis?

It is usually due to minor infection from the bugs in the area and to sensitivity to various irritants such as soaps and urine. The following factors contribute to the problem:

- a thin, sensitive skin which is a feature in some girls
- irritating things such as soap, urine and faeces
- moisture and humidity
- wet bathers
- lack of hygiene
- dribbling of urine especially in obese girls
- frequent self-handling including masturbation
- eczema in children prone to it

What are the symptoms?

- The main symptom is recurrent episodes of discomfort and soreness.
- Another is mild stinging on passing urine (this is often confused with a urinary infection in which passing urine is usually burning and painful. It is important for your doctor to check the urine to make sure).
- There may be a smelly vaginal discharge, or more commonly a slight yellow discharge may be seen on the underwear.
- Itching, which causes the child to scratch the genital area, thus aggravating the problem.

What are uncommon causes?

There are some important underlying subtle causes to keep in mind with vulvovaginitis in children. These include:

- a foreign object in the vagina such as a small toy—this should be considered if the discharge is heavy
- sexual abuse
- pinworm, also known as threadworm—this should be considered especially if there is considerable scratching at night

What are the risks?

Vulvovaginitis is a common and generally harmless condition. One complication is adhesion of the labia where the inner folds of the vulva stick together, but this is easily treated. It is important to seek medical attention if there is painful urination (which suggests infection of the bladder), excessive scratching (check the anal area one hour after going to sleep for worms) or a heavy, perhaps bloodstained discharge (indicates deeper infection).

What is the treatment?

Attention to good hygiene is the first line of treatment. The child should have regular warm baths followed by careful drying. It is helpful to soak the child's bottom in a warm, shallow bath containing half a cup of white vinegar. Alternatively bicarbonate of soda (baking soda) as 10 grams to 10 litres of warm water can be used.

Soothing creams should be applied about 3 times a day. Any used for nappy rash are suitable but two recommended ones are zinc and castor oil cream and Egoderm ointment.

If a powder is required use zinc oxide (e.g. Curash).

What are preventive methods?

- Attention to bathing and drying as described above.
- Teach good toileting practice under parental supervision.
- Dress the child in cotton underwear and with loose-fitting clothing.

Things to avoid:

- perfumed soaps
- bubble baths
- soap residues after bathing
- sitting in wet swimming costumes (change immediately after swimming)
- synthetic underwear
- getting overweight

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Warm-up exercises for the legs

The aim of the warm-up period for all athletes is to ensure top performance and reduce the chance of injury, especially early in a sporting event.

- The warm-up should begin with 10 minutes of slower, easier activity such as slow jogging, running on the spot, skipping or cycling.
- The stretching exercises should be gentle at first and should not overstrain or tire or be painful.
- The leg exercises are in addition to general exercises for other parts of the body.
- Ideally, a tracksuit should be worn.

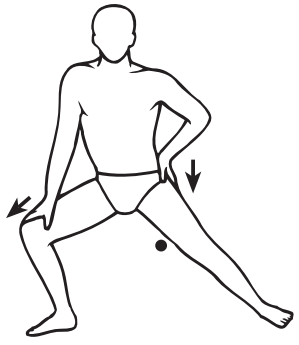
The exercises

The drawings illustrate stretches for the left leg. Stretch until the muscle just begins to feel tight (*stretch point*). It is important to hold the stretch position for 20–30 seconds, relax for 10 seconds and repeat each exercise for each leg. The stretching program should last 10–20 minutes. A practical program is to perform each exercise 2 or 3 times on each leg.

Hip stretching

Adductors

Stand with your feet apart. Bend one knee while keeping the other straight. Bend until a stretch is felt in the groin and inner thigh (stretch point).



Adductor stretch

Flexors (iliopsoas)

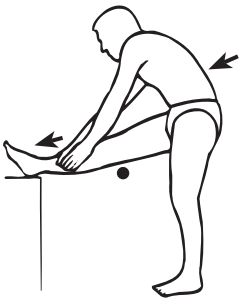
Lie on your side. Grab the ankle of the uppermost leg with your hand. Pull the ankle backwards and slightly to the side.

Flexor stretch

Thigh stretching

Hamstrings

Place the heel of the right leg on a low table or chair. Keep the knee straight. Reach forwards with both hands until you reach stretch point.



Hamstring stretch

Quadriceps

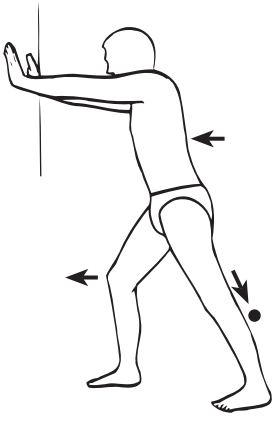
With one hand supporting the body, grasp the ankle with the other so that the foot is pulled up towards the buttock until you reach stretch point.

Quadriceps stretch

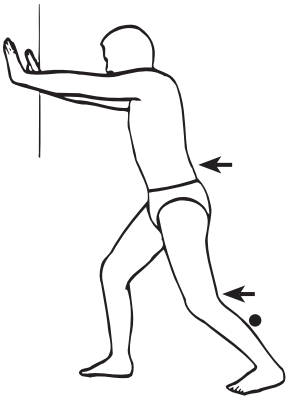
Calf/Achilles tendon stretching

Calf muscles

1. Stand about 1.5 m from the wall and lean against it. Keep your left knee straight and your left foot flat on the floor. Bend your right knee forwards until you reach stretch point.
2. Stand in a similar position, but bend the left knee so that stretch is felt deeper and lower in the leg.



Calf muscle stretch 1



Calf muscle stretch 2

It is very important to *warm down* by repeating the gentle stretching exercises and jogging for several minutes after sporting activity.

Warts

What are warts?

Warts are lumps on the skin produced by a virus. The virus invades the skin, usually through a small injury, and causes the skin cells to multiply rapidly. Wart viruses are spread by touch or by contact with the shed skin of a wart.

Common types

The *common wart* is a small, hard, flesh-coloured lump with a 'cauliflower' surface. It can grow anywhere on the body, but is most common on the hands. It is usually painless.

The *plantar wart* (papilloma) is a wart that grows on the sole of the foot and tends to become pushed in as you walk. It is usually painful, rather like walking with a stone in your shoe.

Anal warts and *genital warts* are usually spread sexually and tend to multiply very rapidly. They are caused by a different strain of wart virus.

How common is the problem?

Warts are common in children and teenagers but less common in adults. About 1 schoolchild in 20 has 1 or more warts.

Do warts disappear if left alone?

Yes—many warts will disappear, without any treatment, if left alone. However, plantar warts and anal/genital warts take longer, and it is advisable to contact your doctor about these warts.

What is the treatment?

The treatment of warts is slow to provide a cure, but a patient approach is usually rewarding. Regular application of one of the proprietary wart paints should suffice, for example, salicyclic acid + lactic acid (both about 17% strength). Do not treat warts on your face and genitals with wart paint, because the skin on these areas is very sensitive. Anal and genital warts require special professional care.

Common warts

1. Soak the wart in warm, soapy water.
2. Rub back the surface of the top of the wart with a pumice stone.
3. Apply the prescribed paint or ointment, but only on the wart. It may be wise to protect the surrounding healthy skin with petroleum jelly (Vaseline).

Note:

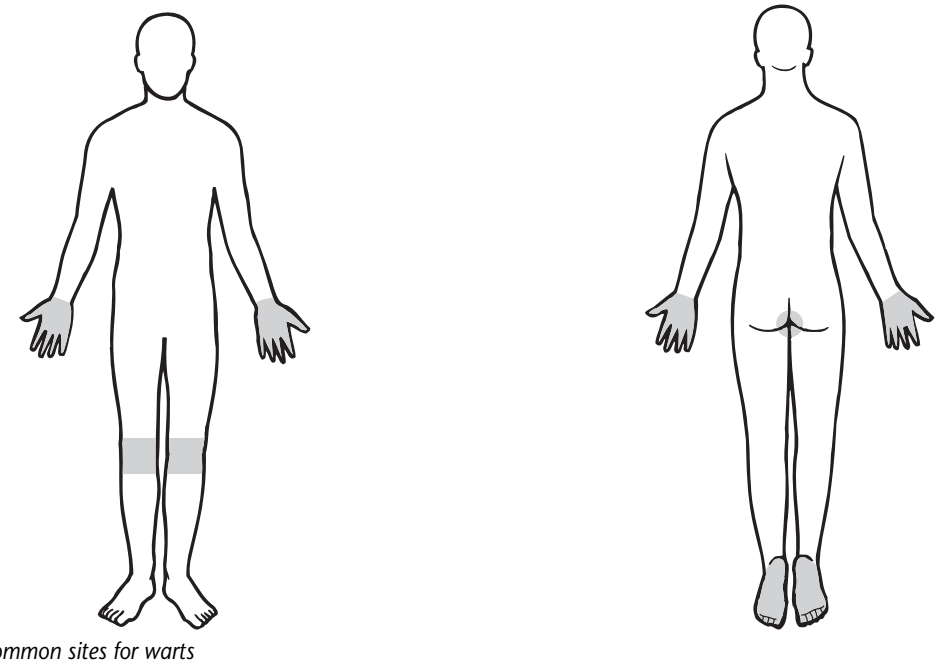
- Carry out this treatment every day.
- Carefully remove the loose dead skin between applications.

Plantar warts

The wart is first shaved back (pared) by your doctor with a sterile blade (this should *not* be done at home). Then use the same steps as for common warts. The use of the pumice stone is very important. Your doctor should check progress in 6 weeks. It is usually a very slow process.

Other methods

Some warts remain stubborn and other methods can be used by your doctor. These include freezing with liquid nitrogen, electrocautery and the application of very strong pastes. Most warts eventually respond to treatment, leaving the skin free of a scar.



Common sites for warts

Warts: genital warts

What are genital warts?

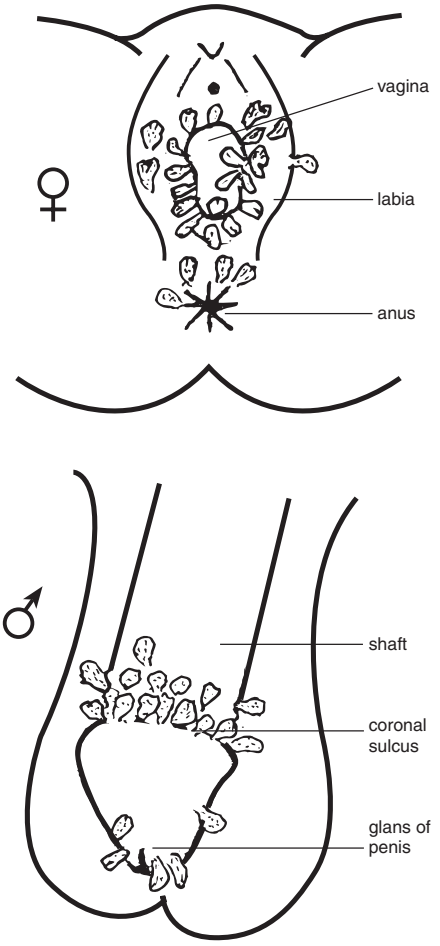
Genital or *venereal warts* are soft clusters of thin frond-like warts that grow on and around the external genitals of both sexes of sexually active adolescents and adults. They are not the usual hard warts that we get on our hands and other body parts but are soft thin fleshy projections that grow in clusters rather like bunches of tiny grapes or cauliflowers.

What are the symptoms?

The lumps are found on the tip of the penis in men, on the vaginal opening in women and on the anus in both sexes. They do not usually cause irritating symptoms such as pain or itching.

What is the cause?

They are caused by one of the many varieties of human papilloma virus that cause all types of warts. The infection is relatively easily spread from person to person through close human contact. It is usually spread through sexual activity and is one of the sexually transmitted (venereal) infections (STIs).



However, not all cases are sexually transmitted; they may spread from warts on the fingers, especially onto a very moist vaginal area. The risk of infection increases with poor hygiene, crowded living conditions and poor nutrition. Sexually, the risk increases with multiple sexual partners, the presence of other venereal diseases and not using condoms.

Do genital warts occur in children?

Yes, they do, but it is very uncommon. If they are found, the possibility of sexual abuse must be considered. However, in the majority of children the spread is by normal intimate parent-child contact.

What are the risks?

The warts usually eventually disappear even with no treatment. Although some types of papilloma virus are associated with cervical cancer in women, the virus that causes genital warts is different and is not considered to be a strong risk factor. Regular smears should be taken as usual. Spread of the virus through sex is a probem as condoms do not always give full protection. It is also appropriate to check for other STIs as these are associated with genital warts.

How can spread be prevented?

Genital warts are very contagious, so sexual activity should be avoided until all the warts heal completely; then condoms should be used during sexual intercourse. It is important not to scratch the warts and to practise good hygiene by keeping the genital area well washed and dry. Sexual partners should be informed by you, checked by their doctor and perhaps referred to a specialist clinic.

What is the treatment?

The treatment varies according to the size and proportion of the warts. Warts may be removed by chemical or physical means, e.g. electrocautery or liquid nitrogen. Treatment is therefore selected on an individual basis. The simplest treatment for small numbers of warts is podophyllotoxin paint which is usually applied two times a week by your doctor. A promising new but more expensive chemical agent that works through the immune system is imiquimod cream applied 3 times a week.

Despite adequate treatment it is common for genital warts to recur, but they can be retreated.

Patients need good counselling and support for this embarrassing problem; thus it is vital to talk through the problem and discuss your feelings with your doctor. Follow-up visits are important.

Whiplash

What is whiplash?

Whiplash is the term applied to a sudden injury of the neck when the neck is 'whipped backwards' forcibly in an accident. It usually occurs in motor vehicle accidents but can occur in contact sports such as football and other similar accidents. It is a term that doctors prefer not to use now, instead referring to it as an *acceleration hyperextension injury*.

How does it occur in motor vehicle accidents?

In a rear-end collision, your head is thrown back into overextension and then bends sharply forwards on the rebound. This is commonly called a whiplash injury, but it is really an overextension injury.

If your car collides with a stationary object, your head bends sharply forwards at first and then rebounds backwards. This results in a similar injury to the neck.

What happens to the neck?

The structures that are usually injured include the bones of the cervical spine and the soft tissues such as ligaments, muscles, tendons, discs and nerves. The ligaments that bind the vertebrae together are stretched and possibly torn, rather like a sprained ankle. Some bleeding occurs into the ligaments.

The many small joints of the neck (facet joints) are jarred and bruised. Small stress fractures may occur in the cervical spine.

Note: Plain X-rays do not usually show up these damages to the bones, joints and soft tissues.

What are the symptoms?

The main symptoms are pain and stiffness in the front and back of the neck which develop either immediately or later. This may be up to 24 hours or even 2–3 days later.

Other possible symptoms:

- headache
- difficulty lifting the head as it feels too heavy for the neck
- pain, tingling or weakness in the arms
- dizziness
- nausea
- difficulty or soreness swallowing

Apart from a sore neck there is a tendency to feel flat and depressed for about 2–3 weeks. Talk to your doctor about this feeling if it persists.

Note: The symptoms are usually worse if there is pre-existing osteoarthritis of the spine.

3 out of 4 people involved in rear-end collisions do not experience neck symptoms.

What is the outlook?

The outlook is invariably good with every chance of a normal recovery that can take any time from 1 to 2 weeks up to about 3 months. A better outcome is obtained with good treatment but recovery will not be speeded up by repeated X-rays or wearing a cervical collar.

What are the preventive issues?

The following make accidents more likely:

- bad driving habits such as 'tailgating'
- driving in wet or icy weather
- driving under the influence of alcohol or other drugs including prescribed mind-altering drugs

The following reduce the risk:

- good careful defensive driving
- not drinking and driving
- padded headrests in your automobile
- good stoplights including rear window lights

Note: Ask your doctor about any drugs you are taking.

What is the treatment?

Your neck needs time to heal just like a sprained ankle. Physiotherapy-supervised treatment is very helpful.

Self-help

- *Cold/heat*: Apply ice/cold packs to the neck for about 10–20 minutes regularly during the first 3 days then apply heat. The heat includes very warm small towels, hot showers (twice a day) and heat packs about 4 times a day for 10–15 minutes.
- *Exercise*: The best treatment is exercising your neck as soon as possible, even though it feels stiff and tender. This also includes moving your head around as usual in your normal daily activities but avoiding heavy lifting and overexertion. Your doctor or therapist will advise on the best exercises. Any slow deliberate stretching of your neck is good.
- *Mobilisation and manipulation*: The gentler mobilisation therapy is helpful but manipulation of the neck is not generally recommended. Massage is helpful.
- *Pain-killers*: If pain is a problem the best first-line option is to take paracetamol every 4–6 hours.
- *Cervical collar*: Supporting your neck with a therapeutic collar with the back higher than the front can provide comfort but the less time in it the better (e.g. 2–3 days). Keep the neck in a slightly bent forward non-painful position. Discard the collar as soon as possible and start moving your neck.
- *Pillow*: Sleep with a very flat pillow, a small towel rolled to about 5 cm thickness or a cervical pillow (best option). Inappropriate sleeping positions delay healing.

Medication

Your doctor may prescribe a short course of anti-inflammatory tablets or muscle relaxants to make your neck more comfortable, or organise injections of local anaesthetic.

Worms

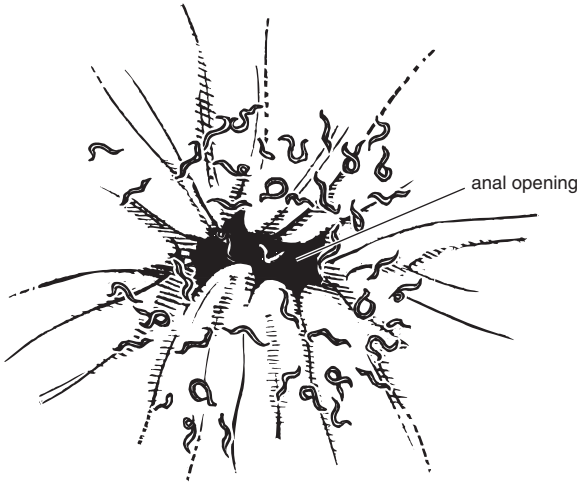
Worm infestation is still reasonably common, especially in tropical or subtropical communities. There are various types of worms, including the common *pinworm* (also called threadworms or enterobiasis), *roundworm* (these can be very large), *hookworm* and *whipworm*. The treatment for each of these worms is almost identical. This leaflet will focus on pinworms.

Pinworms

Pinworms are tiny white worms about 1 cm (½ inch) long. They are more common in children, especially school children, although they can infect adults. The host of these worms is humans and they are spread from human to human. There is no evidence that they are picked up from family pets.

Life cycle of pinworms

Pinworms enter the gut as eggs in contaminated food or sometimes through bare skin in contact with contaminated soil. The eggs hatch in the intestine and about 2 weeks later the female worm lays eggs around the anus of the person. These eggs then hatch into the tiny worms. The eggs or worms cause irritation of the anus and the itching provokes scratching, often subconsciously at night. The child thus picks up some eggs on the fingers. Sucking the finger or eating food with unwashed hands will then cause re-infection. The child may pass on the worms to other members of the family by contaminating food, sheets and towels.



What are the symptoms and how are they diagnosed?

Pinworms do not generally cause ill health. The typical symptom is anal itching but in many cases there are no symptoms. The diagnosis is usually made by observing the tiny worms (they look like small white threads) around the anus at night when the female worms come out to lay eggs. Inspection is best done about 1 hour after the person has gone to sleep. The worms may be seen in the faeces. The most effective diagnosis is made by having samples of worms or their eggs inspected in a pathology laboratory. The eggs are collected by placing adhesive tape on the skin around the anus first thing in the morning.

What is the treatment?

Self-help

- Scrupulous hygiene by the whole family is the key to solving this problem.
- The hands should be thoroughly washed after going to the toilet, after handling a pet and before touching any food.
- Fingernails should be clipped short, as eggs tend to lodge under nails.
- Children should wear pyjamas rather than nightgowns.
- The patient should shower each morning.
- Bed linen (sheets and pillowcases), nightwear and underwear should be changed and washed in very hot water daily for several days.
- Rooms used by the affected person or persons should be vacuumed daily.

Medical help

The affected person should take one of the commonly used drugs such as pyrantel, albendazole or mebendazole, usually as a single dose. It should be repeated after 2–3 weeks. If this treatment is not successful, all members of the family should be treated, even though they have not been diagnosed as having worms. An ointment may be prescribed to relieve anal irritation.