INFORMATION ON SHINGLES/HERPES ZOSTER

Introduction

This leaflet provides information about shingles (herpes zoster). Up to one in five people will develop shingles during their lifetime. The disease, with its characteristic skin rash and discomfort, may affect any part of the body and is nearly always confined to one side.

Shingles is often a mild disease consisting of a skin rash for a few days, accompanied by pain and itching, which then heals without complication. However, pain may persist for some time after the rash has healed. More serious complications can happen, but are rare. Second attacks are unusual, but about one person in 20 who has had shingles may have it again. The second occurrence is usually many years after the first and may not occur in the same area of the body.

The early symptoms of shingles may be effectively treated, and some complications prevented, with antiviral drug therapy. People with medical conditions that reduce their immunity develop shingles more commonly, and may be more prone to complications.

What is shingles/herpes zoster?

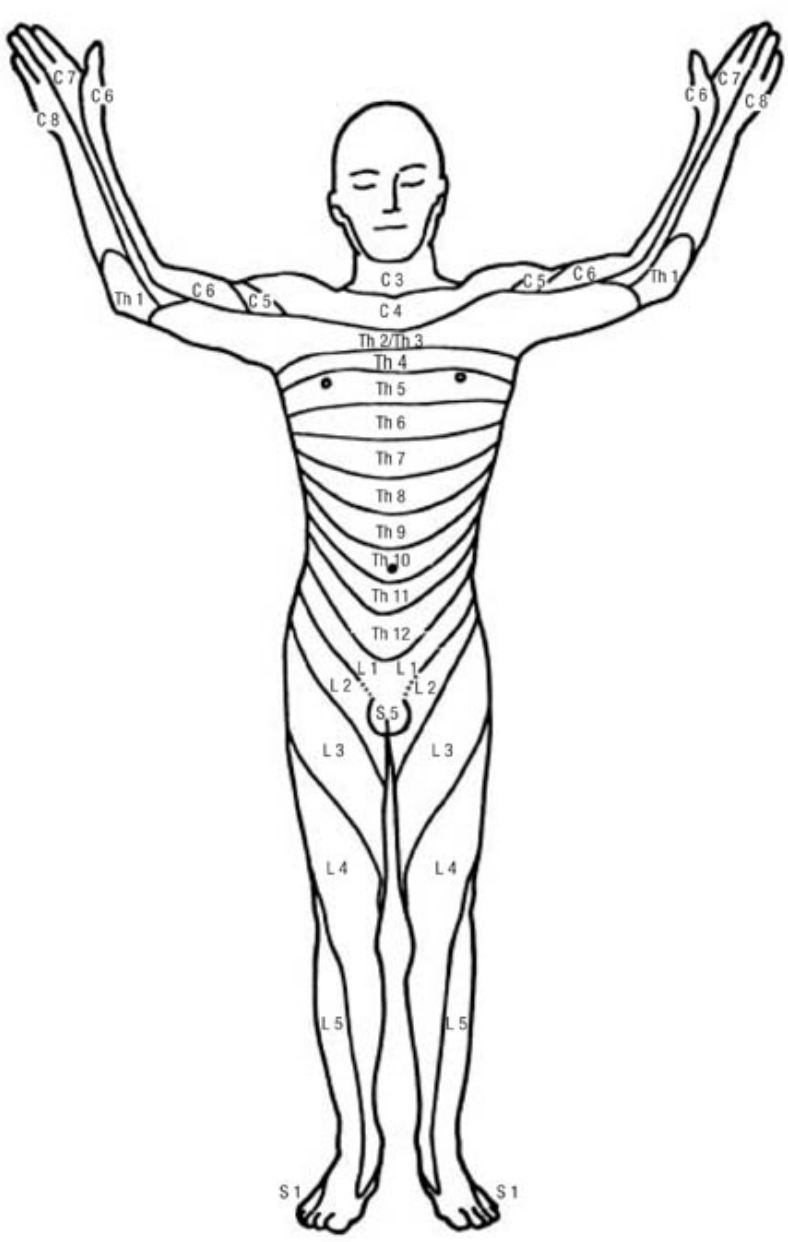
Shingles is the common name for herpes zoster, which is caused by the varicella zoster virus. This virus also causes chickenpox. Shingles only occurs in people who have had chickenpox, which often happens in childhood. In hot climates chickenpox often occurs in adults, but shingles in later life is just as common. After chickenpox, the virus becomes dormant in nerve tissue near the spinal cord or brain, but causes no symptoms.

When immunity declines – either as a natural result of growing older or more rarely because of some diseases or their treatment – varicella zoster virus can become active again. Shingles may also occur in children or young adults, but this does not mean that they are very likely to have other serious illnesses. The virus multiplies and spreads along a nerve towards the skin supplied by that nerve (the dermatome, see figure overleaf), resulting in the characteristic rash. Inflammation and damage to nerve fibres caused by the virus, results in pain and changes in sensation. There is often very slight muscle weakness in the same area of the body but this is usually not noticeable.

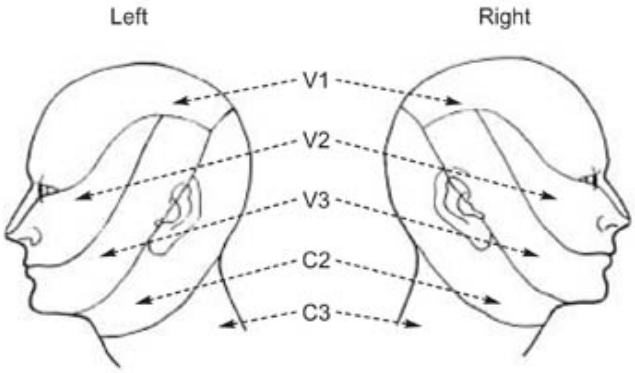
Occasionally shingles affects the nerve controlling the muscles of the face or limbs, and weakness may be more prominent. As the virus is overcome by the body's immune system, or after treatment with antiviral drugs, the pain and rash subside. Some scarring may remain, which may be either darker or paler than the surrounding skin. Similarly, damaged nerve tissue may cause ongoing pain or altered sensation in the area. The latter may take the form of numbness or increased sensitivity.

What are the symptoms of shingles?

The first symptom of shingles is often an aching pain, extreme sensitivity or itching in an area on one side of the body. At the same time, the person might feel unwell or have a slight fever. A day or a few days later a small red area or spots (called papules) often develops. This increases over several days to produce a rash in the distribution of a nerve (dermatome - see figure below). The rash may be mild with just a few spots, or may develop to cover much or all of the dermatome. The spots may develop into blisters (known as vesicles) that may weep and form scabs. A few isolated spots may occur in other areas of the body.



C=cervical; Th=thoracic; L=lumbar; S=sacral



C=cervical; V1=1st division of the 5th cranial (trigeminal) nerve; V2=2nd division of the 5th cranial nerve; V3=3rd division of the 5th cranial nerve.

Pain may include constant aching or burning, and intermittent shooting pains. Unpleasant pain may be triggered by things like a light touch, or a cool breeze, which are not normally painful (this is known as allodynia).

Many people feel somewhat tired or unwell in the early days of shingles. If the nerve supplying the eye is affected, the eye may be painful or red and the eyelids may be swollen.

Is there any treatment?

When you visit your doctor it is likely that he or she will be able to diagnose shingles from the information you give about your symptoms and by looking at your rash. Occasionally he will advise blood tests or he may take a swab from weeping spots, if you have any, to confirm the diagnosis.

In many cases, particularly in younger people and when the rash and pain are mild, the condition will get better without specific antiviral treatment, although mild pain-killing drugs, such as paracetamol (acetaminophen), may help. However, in older people and those with more severe shingles, natural healing may be slow or incomplete and additional treatment is desirable.

The antiviral drugs valaciclovir, aciclovir and famciclovir have been shown to be safe and to reduce the pain of shingles, as well as producing more rapid healing of the rash. These drugs also reduce the risk of pain becoming long lasting and may prevent or lessen other complications such as eye damage.

Painkillers are often necessary and sometimes the milder drugs such as paracetamol (acetaminophen) may not be adequate. It is important not to take more than the dose advised by your doctor or pharmacist. Your doctor will be able to advise the use of stronger painkillers if necessary. There is some evidence that other drugs such as amitriptyline may further protect against pain becoming long-lasting.

What can I do to help myself?

It is helpful to be aware that an unexplained pain on one side of your body in a distinct area may be followed a day or so later by the characteristic skin rash of shingles. If so, it is best to see a doctor promptly so that a diagnosis may be made and treatment may be given, if necessary. If your eye or the area around your eye is affected, visiting a doctor promptly is particularly important.

Wearing light cotton clothing rather than artificial fibres may reduce pain. If you are prescribed medication, you should take it exactly as instructed. You might find it helpful to apply cold packs to reduce pain – for example a small packet of frozen peas may be applied to a painful area quite frequently. Put a piece of cloth, such a shirt or tea towel, between the cold pack and the skin for protection.

The unpleasant pain and unwell feeling tend to improve more quickly if you return to normal social and physical activities as soon as is sensibly possible. If the rash and pain do not improve after about 10 days, or unexpected symptoms develop, it is important to obtain further advice from your doctor.

You cannot give shingles to anyone else. However, if you are in contact with anyone who has never had chickenpox, they may catch chickenpox from you. This is usually not dangerous but until your shingles has healed, you may prefer to avoid contact with anyone at risk of complications from chickenpox (such as children, pregnant women and those with diseases such as leukaemia or people who are undergoing cancer treatment). Remember that adults who have grown up in hot climates may not have had chickenpox.

Clinical trials are being undertaken to see if older adults at risk of developing shingles may be offered vaccination to increase their immunity. These trials are not yet complete, so at present the value of this form of prevention is not certain. In some countries, children are now vaccinated against chickenpox and it is likely that they will either never develop shingles or that it will be very mild.

Are there any long-term effects or serious complications?

The commonest long-term complication of shingles is persistent pain (also called postherpetic neuralgia). About one in two people who have shingles will still have some pain a month after their illness started. Probably about one in five will have some pain after 3 months, but one in 20 or so may still have pain beyond 1 year. This is the result of nerve damage caused by the virus and can be difficult to treat. Your doctor will be able to manage the problem in many cases, but may need to refer you to a Pain Management Clinic for more specialized care.

Drugs commonly and effectively used to treat postherpetic neuralgia include amitriptyline or gabapentin (given by mouth), or local anaesthetic or capsaicin

(applied to the skin). It is important that your doctor explains the nature of these drugs and their benefits and side-effects carefully to you – if in any doubt, please ask.

Less common complications are infection of the affected skin (caused by bacteria) and damage to the eye (if the virus has affected the branch of the trigeminal nerve that supplies the eye). Problems occur if the virus spreads to the brain or other organs – but this only occurs in very rare situations.

Am I at special risk?

The likelihood of developing shingles increases as we grow older, although it can occur at any age. By the time we reach 80 about one in every 100 people will develop shingles in any year. Some diseases that affect the immune system increase the chance of developing shingles, and these include HIV or malignant diseases such as lymphoma. It should be emphasized that the vast majority of cases of shingles are unconnected with any serious disease. Other causes of decreased immunity include radiotherapy and cytotoxic drugs used to treat some malignant conditions, the use of immunosuppressant drugs after organ transplantation, and steroid medications used in conditions such as rheumatoid arthritis.

Where can I get more information on shingles/varicella zoster virus?

The International Herpes Management Forum website: http://www.ihmf.org/
The VZV Research Foundation website: http://www.vzvfoundation.org/
The Neuropathy Trust: http://www.neuropathy-trust.org/

Dr Robert Johnson
Consultant Anaesthetist
Bristol Royal Infirmary
Department of Anaesthesia
Bristol