



VENOUS LEG ULCERS

What are the aims of this leaflet?

This leaflet has been written to help you understand more about venous leg ulcers. It will tell you what venous leg ulcers are, what causes them, what can be done about them, and where you can find out more about them.

What is a venous leg ulcer?

A venous leg ulcer is an open wound in the skin of the lower leg due to high pressure of the blood in the leg veins.

What causes venous leg ulcers?

The main cause of venous leg ulcers is faulty valves inside the leg veins. These valves normally allow the blood to flow up the leg towards the heart, and they also prevent backward flow down the leg. If the valves are faulty, backward flow is not prevented and pressure builds up inside the veins. The persistent high pressure in the leg veins, caused by the faulty valves, damages tiny blood vessels in the skin. The skin will become dry, itchy and then inflamed. Due to the poor blood supply it doesn't heal well, and so the skin can easily break down to leave an open wound after minimal trauma. This is how the ulcer forms.

Some people are born with weak valves. In others, the valves are damaged after a venous thrombosis (a blood clot forming within a vein). Valves tend to weaken with age. Sometimes they are a result of faulty veins' valves and narrow arteries in the limbs. Any infections of the wound can make the ulcers bigger and painful and delay their healing.

Are venous leg ulcers hereditary?

Venous leg ulcers are not hereditary; however, some of the things that increase your chances of developing a venous leg ulcer do run in families - such as poor valves, a tendency to have a blood clot or to have abnormal veins and arteries in the lower limbs.

What does a venous ulcer look like and what are its symptoms?

Before the ulcer appears, you may notice your leg swelling and you may find it painful to stand for long periods. Brown spots and patches may appear on the skin, and the altered blood flow in the leg can make the skin look red or blue. The skin of the lower leg may become itchy and scaly, and firm tender areas may develop under it.

The ulcer itself is an open wound. The bed of the ulcer may show bumpy, moist and red healing tissue, or may be covered in a yellowish-grey layer. Ulcers often leak fluid, the amount of which can vary.

A venous ulcer can be painful, although the pain is usually relieved when the pressure is controlled by raising the leg or by wearing compression (tight and stretchy) bandages or stockings. Some patients find that it can be painful during dressing changes when their ulcer is exposed to the air. However, if your ulcer gives you severe pain, this may mean that it has other causes, such as blockages in the arteries, infection or development of a blood clot in the vein, and so you should tell your doctor immediately.

There can be associated leg swelling, due to inflammation in the skin. Long-standing inflammation can also lead to thickened skin, scaliness, and harmless firm bumps on the skin.

How will a venous ulcer be diagnosed?

The changes seen in your skin will indicate to your doctor that you have a venous leg ulcer. The doctor or nurse will feel for the pulses in your foot and may measure the blood pressure in your leg with a small ultrasound probe ("Doppler"), or more specialised investigation of the circulation in an X-ray department. Occasionally other tests are needed to exclude other conditions that can look like a leg ulcer, such as diabetes, or inflammation of the blood vessels (vasculitis). These tests include removing a small piece of skin for microscopic examination (a biopsy), and/or blood tests.

Can a venous leg ulcer be cured?

Yes, however, healing of the ulcer can take time and it depends on your general health and other skin conditions. If there are other conditions such as diseased arteries which are contributing to the ulcer, it may be more difficult.

How can a venous ulcer be treated?

It may be necessary to wash legs in a bucket using tap water and a bath emollient or soap substitute drying carefully afterwards. Occasionally potassium permanganate (a pale pink antiseptic solution) soaks may be prescribed if the leg ulcer is leaking heavily.

CAUTION: This leaflet mentions ‘emollients’ (moisturisers). When paraffin-containing emollient products get in contact with dressings, clothing, bed linen or hair, there is a danger that a naked flame or cigarette smoking could cause these to catch fire. To reduce the fire risk, patients using paraffin-containing skincare or haircare products are advised to avoid naked flames completely, including smoking cigarettes and being near people who are smoking or using naked flames. It is also advisable to wash clothing and bed linen regularly, preferably daily.

A dressing is then put over the ulcer. There are many types of dressings, but one of the most common is a simple non-stick fabric dressing. The dressing will be covered by a compression bandage or stocking, from your toes to your knees. These stop the damaging effects of the high pressure in the veins. Compression bandages are a “multilayer” dressing that can be in three or four layers. Alternatively, you can use compression stockings. Usually bandages are used until the ulcer has healed or nearly healed, and then stockings are used after that. The bandages will usually need to be changed and reapplied one to three times per week.

Other treatments for your ulcer might include an emollient (moisturising) cream for dry skin, antibiotics for infection, and a steroid cream for any eczema (irritation or itching) on the skin surrounding the ulcer. Sometimes the eczema around an ulcer can be due to a reaction to either the dressings that are being used to treat it, or the creams and ointments being put on around it. Lanolin, antibiotics creams, and preservatives are common causes of this. Your doctor may refer you to a specialist to investigate the blood flow and valves in the affected leg. Ultimately, if an underlying cause can be identified and treated, the ulcer can heal better.

Self help (What can I do)?

- Compression bandages or stockings work best if you exercise your leg regularly, for example by walking. If you are less mobile, exercise your leg muscles by moving your foot up and down at the ankle.
- When you are sitting down, keep your legs raised by putting your feet on a stool or a chair. Don't sleep in a chair with your legs hanging down and avoid standing up for long periods of time.
- If you smoke, you should cut down and preferably stop.
- You should have a healthy, balanced diet to promote healing.
- Moisturise your skin regularly as the surrounding skin may be prone to dryness.
- Follow the instructions carefully when you wash your stockings or bandages. Washing them at the wrong temperatures can damage the elastic. You need to make sure they are replaced every 3-6 months because over time they lose their stretch.
- If you put on your stockings yourself, avoid turning over the tops and don't pull them too high up your leg.

Where can I get more information?

Web links to detailed leaflets:

<http://cks.nice.org.uk/leg-ulcer-venous#!topicsummary>

<http://www.patient.co.uk/health/venous-leg-ulcers-leaflet>

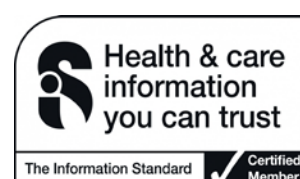
<http://www.dermnetnz.org/site-age-specific/leg-ulcers.html>

For details of source materials used please contact the Clinical Standards Unit (clinicalstandards@bad.org.uk).

This leaflet aims to provide accurate information about the subject and is a consensus of the views held by representatives of the British Association of Dermatologists: individual patient circumstances may differ, which might alter both the advice and course of therapy given to you by your doctor.

This leaflet has been assessed for readability by the British Association of Dermatologists' Patient Information Lay Review Panel

**BRITISH ASSOCIATION OF DERMATOLOGISTS
PATIENT INFORMATION LEAFLET**



PRODUCED AUGUST 2004
UPDATED MAY 2010, JANUARY 2014, MARCH 2017
REVIEW DATE MARCH 2020