



## **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 sore 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 prevent backward flow down the leg. If they 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 then becomes dry, itchy and then inflamed. Due to the poor blood supply it doesn't heal well, and can easily break down to leave an open sore 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.

### **Are venous leg ulcers hereditary?**

Venous leg ulcers are not hereditary. However, some of the things that put you at risk of developing a venous leg ulcer do run in families - such as poor valves or a tendency to have a blood clot.

## **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 can turn the skin various shades between red and blue. Your skin may become itchy and scaly, and firm tender areas may develop under it.

The ulcer itself is an open sore. The bed of the ulcer may show bumpy, moist and red healing tissue, or may be covered in a yellowish-grey mucky-looking 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 is 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, and you should tell your doctor.

## **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. However, it is important to check for other possible causes, especially a poor arterial circulation. To do this, 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+). Occasionally other tests are needed, such as removing a small piece of skin for microscopic examination (a biopsy), blood tests, or more specialised investigation of the circulation in an X-ray department.

## **Can a venous leg ulcer be cured?**

If it is simply a venous ulcer, yes. But if other conditions such as diseased arteries are contributing to the ulcer, it may be more difficult.

## **How can a venous ulcer be treated?**

To start with, a nurse will usually clean your ulcer and the skin surrounding it. Salt water or potassium permanganate (a pale pink antiseptic solution) may be used for this. It may be easier to do this by soaking your lower leg in the solution. Moisturisers may also be used during the washing/cleansing process in the form of oils or creams.

A dressing will then be put over the open ulcer. There are many types, 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 just below your knees. These stop the damaging effects of the high pressure in the veins. Compression bandages are also known as %multilayer+or %three or

four-layer+bandaging. Alternatively you may be given 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 is due to a contact allergy to something present either in the dressings that are being used to treat it, or in the creams and ointments being put on around it. Lanolin, topical antibiotics, and preservatives are commonly involved in this. If contact allergy is suspected, your doctor may suggest sending you for allergy testing (this is known as patch testing).

If healing is very slow, pinch skin grafting to the ulcer may be considered. In some cases, an operation on the veins helps to reduce the pressure.

### **What can I do to help?**

- 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 a long time.
- If you smoke, you should cut down and preferably stop.
- You should have a healthy balanced diet. If you are too heavy, try to lose weight.
- 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 regularly because over time, they lose their stretch.
- If you put on your stockings yourself, avoid turning over the tops. Don't pull them too high up your leg.

### **Where can I get more information?**

*Websites:*

[http://cks.nhs.uk/leg\\_ulcer\\_venous](http://cks.nhs.uk/leg_ulcer_venous)

<http://www.phlebology.org/patientinfo/conditions.html>

**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: its contents, however, may occasionally differ from the advice given to you by your doctor.**

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