

# Venous Leg Ulcer

Information and advice for patients

## *Vascular services*

### **What is a venous leg ulcer?**

A venous leg ulcer is an area of broken skin on the lower leg caused by increased pressure in the veins in the leg. It can vary in colour and size and you may also have symptoms of pain, itching and swelling in the leg.

### **What are the causes of a venous leg ulcer?**

In a normal venous system, the veins in your legs carry blood back to the heart with the help of your calf muscle and foot pump (the movement of your calf and foot muscles during exercise). The veins have a one-way valve to ensure the blood flows upwards towards the heart, against gravity.

Damage to the valves in the veins can lead to the blood building up instead of being pumped back towards your heart. As a result, the pressure in your veins increases. This can lead to swelling of the ankles and leg, pain, aching in your leg, itchy skin, and colour changes in the skin on your leg and eventually a leg ulcer can occur.

The following conditions are linked with the development of a venous leg ulcer which may increase your risk of developing one:

- Varicose veins
- A blood clot in the leg (deep vein thrombosis)
- Faulty valves in the veins
- Fractures or trauma to your leg
- Multiple pregnancies
- Surgery
- Immobility
- Phlebitis
- Obesity
- Limited ankle movement
- Sleeping in a chair for long periods of time

### **How is a venous leg ulcer diagnosed?**

A venous leg ulcer is diagnosed by its appearance and a physical examination and by looking at any history that would indicate a risk of developing a leg ulcer.

Before your doctor or nurse can make a diagnosis and plan the treatment to help heal your ulcer they will need to carry out a detailed assessment. The assessment will look at risk factors, signs and symptoms of venous disease. Part of the assessment will include asking you questions about your general health and what tablets you take. They will also examine the

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ulcer and surrounding skin condition. This information will help to build up a picture of what has caused your leg ulcer.

To help diagnose the cause of your ulcer you may have your ankle brachial pressure index (ABPI) recorded or have a duplex scan of your leg.

**Ankle brachial pressure index** – The blood pressure in your arm and leg is recorded with a hand-held ultrasound machine called a Doppler.

**Duplex scan** – This looks at the blood flow in your legs, to help to see if you have any reflux in your veins.

## **What treatment will I need?**

Most venous leg ulcers can be treated with compression bandage(s) and dressings to the ulcer. The bandages give support to your calf muscle and damaged valves. The bandage(s) help the blood to be squeezed out of your leg back to your heart. A number of layers of bandage(s) may be required to help the blood return to your heart. Your bandage(s) will be applied from your toes to just below the knee. The bandage(s) should feel comfortable, firm and supportive, but not too tight. The pressure in the bandage(s) is greater at the ankle and reduces towards your knee. This is to achieve a gradual pressure from the bandage(s). The bandage(s) are only applied by nurses who have had the appropriate training.

## **What benefits will I have from wearing the bandage(s)?**

The bandage(s) will:

- Help to heal your ulcer
- Help the blood flow the correct way
- Reduce the swelling in your leg
- Help reduce the pain in your leg
- Help to reduce any itching in your skin

## **What are the risks?**

Occasionally the bandage(s) may be too tight or may slip. If you experience any of the following symptoms you should remove the bandage(s) and seek medical advice:

- Pins and needles sensation in your toes
- Continuously blue or white coloured skin in your toes
- Swelling of your toes
- Unusual pain in your leg, foot or toes
- Numbness or reduced sensation

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- Excessive itching, burning or irritation
- Slippage from the bandage(s)

If you have any of these you should contact your district nurse or GP immediately. If you have any leakage through the bandage(s) you should contact your nurse.

If you do not experience any of the above, your bandage(s) should be left in place just as the nurse applied it. Fiddling with your dressing or the bandage(s) can delay healing.

### **What are the risks of not getting treatment?**

If your leg ulcer is not treated then it may not heal or will heal slowly. This can result in your symptoms becoming worse and the ulcer could possibly become infected which would require further treatment.

### **Are there any alternative treatments?**

There are many different compression bandage(s) systems available. If the bandage(s) system you are prescribed does not suit you, discuss this with your nurse who may be able to try another bandage(s) system.

A compression stocking over a dressing may be an alternative, but how successful this is does depend on the size of the ulcer and the amount of fluid that leaks from the wound.

Treatment to your varicose veins may be possible to help it to heal. Your doctor will discuss this with you if it is suitable.

### **How long will it take to heal my ulcer?**

With appropriate treatment some ulcers can heal in a few weeks but others can still take months or years. The key to success is keeping to your nurse/doctor's instructions. There are also many things you can do to help the ulcer heal more quickly.

### **How can I help with the healing of my leg ulcer?**

#### **Weight control**

As extra weight can put extra pressure on the veins in the legs, managing your weight can help to heal your leg ulcer.

#### **Eat healthily**

Eat a healthy, well balanced diet including fresh fruit and vegetables. This will help your wound to heal and help you to manage your weight.

- **Protein** provides the building blocks which repair body tissue. Protein is found in meat, fish, eggs, cheese, milk, nuts and pulses.

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- **Vitamins and minerals** help regulate body functions. They are found mainly in fruit and vegetables. Vitamin C is important in wound healing. Try to include fruit juice with added vitamin C to your diet every day.
- **Iron** is important for red blood cells which transport oxygen around the body. Oxygen is important in wound healing. Iron is found mainly in red meat, offal, fortified breakfast cereals and pulse vegetables.
- **Carbohydrates and fats** are found in bread, potatoes, breakfast cereals, chapattis, butter/margarine etc. They supply food energy and are important in wound healing.

### **Wear comfortable footwear**

Ensure your shoes are not too tight. If they are tight then this can lead to skin damage and a foot ulcer, or the bandage(s) being pushed out of place.

### **Skin care on your legs**

Ensure your skin is moisturised with a unscented ointment or cream e.g. 50/50 Paraffin. Observe your legs, note any skin changes and report them to your nurse/GP. Apply ointment in a downward motion in the evening after removing your stockings.

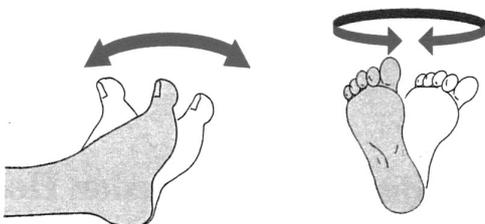
Be aware there is a fire risk with paraffin-based products e.g. 50/50 emulsify ointment. Do not use these near a naked flame or cigarette.

### **Avoid injury**

Be careful not to bang your legs on furniture or sharp objects. Any injury may cause a wound which may take a long time to heal.

### **Walk or exercise regularly**

This will help to keep the calf muscle pump working properly. If you are immobile, perform foot and ankle exercises.



Move feet up  
and down

Rotate feet round  
and round

### **Avoid standing or sitting in one position for long periods**

If this cannot be avoided, activate the calf muscle pump by taking the weight off your heels and standing on your toes and rolling back onto your heels with toes off the ground. This will encourage the venous blood supply to return to the heart.

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### **Elevation**

If you are advised to rest with your legs up you should elevate your legs so your feet are above your waist height.

### **Do not interfere with your bandage(s)**

If you are concerned about your bandage(s), contact your nurse immediately.

### **Pain**

If you are having pain from your leg ulcer, it is important you take your prescribed painkillers regularly and do not exceed the recommended dose. If the pain is becoming worse or the painkillers are not helpful please consult your doctor.

### **Keep all appointments**

It is important that you attend all of your appointments with your nurse or doctor.

### **Recurring leg ulcers**

Once your ulcer has healed you will be measured and fitted with a compression stocking to wear during the daytime. Venous leg ulcers can recur after they have healed. Wearing compression stocking may prevent the leg ulcers from recurring. The stocking should be replaced every 3-6 months depending on the brand of stocking you have and you will be given a further information leaflet about compression stockings.

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### How to contact us

If you have any queries or concerns please contact the vascular nurse specialists. If no one is available, please leave a message on the answerphone with your name, hospital number and contact number.

### Vascular nurse specialists

0121 507 5909

### Further information

#### Circulation Foundation

[www.circulationfoundation.org.uk](http://www.circulationfoundation.org.uk)

For more information about our hospitals and services please see our websites [www.swbh.nhs.uk](http://www.swbh.nhs.uk) and [www.swbhengage.com](http://www.swbhengage.com), follow us on Twitter @SWBHnhs and like us on Facebook [www.facebook.com/SWBHnhs](http://www.facebook.com/SWBHnhs).

### Sources of information used in this leaflet

Royal College of Nursing, 'The nursing management of patients with venous leg ulcers', September 2006

If you would like to suggest any amendments or improvements to this leaflet please contact the communications department on 0121 507 5495 or email: [swb-tr.swbh-gm-patient-information@nhs.net](mailto:swb-tr.swbh-gm-patient-information@nhs.net)



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