Treating and healing leg ulcers

Introduction
Leg ulcers occur on the lower leg, ankle or foot. They can be uncomfortable and painful, and can affect normal, everyday life.

This leaflet describes leg ulcers, how they can arise and the complications associated with them. It also explains diagnosis and treatment options, and provides guidance and advice on how to prevent their recurrence.

Effective diagnosis and prompt treatment can give leg ulcers the best chance to heal well in the shortest time.

What is a leg ulcer?
In its simplest term a leg ulcer is a break in the skin below the knee. At some point in their lives, most people will have experienced a knock or a bump to their lower leg, resulting in a skin break. For most, this sort of injury will heal without a problem in a week or two. But when this break in the skin doesn’t heal with simple dressings, it can be an indication that an underlying condition or conditions are preventing appropriate healing.

At this stage it is important to seek prompt, appropriate medical advice in order to look for and, wherever possible, correct any underlying medical conditions that are preventing healing. Specifically, if the ulcer has not healed after two weeks, or if it is bigger than 2.5 cm² (the size of a 50p piece), then this is a chronic leg ulcer and specialist medical attention should be sought.

Causes of leg ulcers
Around two-thirds of leg ulcers that do not heal may have an underlying problem related to disease of the veins of the leg. These are called venous ulcers.

Other contributing factors that can prevent healing include peripheral arterial disease, diabetes, inflammatory disease such as vasculitis or arthritis, obesity, sedentary lifestyle and infection.

Venous ulcers
Venous ulcers are so called when the underlying causative factor appears to be chronic venous insufficiency. This occurs when the walls of the leg veins and/or the valves in the veins are not working efficiently, making it difficult for blood to completely return from the legs to the heart.

What brings about this insufficiency? Normally the blood travels back to the heart from the feet by leg muscle pump action and valves in the veins which prevent blood from falling back down again when the leg muscles relax. If the leg muscles become weak and/or the vein valves stop working because they are weak or damaged, then blood travels down the leg instead of up.

This ‘reflux’ brings about an increase in pressure inside the veins. This in turn causes the walls of the veins to stretch and become dilated and twisted, so forming varicose veins.

Symptoms include pain, itching and swelling when the ulcer is infected. Patients may also have swollen ankles filled with fluid and discoloration or hardening of the skin around the ulcer. Related symptoms include a feeling of heaviness and varicose eczema.

Both venous and arterial disease in the legs can be easily looked for by using duplex ultrasound.
Treatment aims and options

Treatment aims
The main aims are:

 to control the high pressure in the leg veins;
 to heal the ulcer and correct any underlying causative factors.

Provided that the arterial supply to the leg is adequate, the mainstay of leg ulcer treatment is compression bandaging.

If reflux is found, then in the superficial veins it may be beneficial to have this treated.

Elevating the leg
The higher you can elevate your leg, the lower the pressure on the leg veins. Aim to put your legs up whenever you can and as high as you can: for example, on the arm of the sofa. Elevating the lower end of your bed by 15 cm (6 inches) will raise your feet higher than your head when in bed.

Compression bandages and dressings
To keep the pressure in the leg veins at the ankle low when you are standing, compression bandages may be applied to your leg; several layers may be required. Once the ulcer has healed, compression stockings are usually needed to help prevent the ulcer from returning.

Dressings are applied under the bandage. As the ulcer is treated, different dressings will be required depending on the state of the ulcer, so these dressings will change as the ulcer progresses.

At Premier Vascular we use the most up to date and least cumbersome forms of compression.

Treatment options for varicose veins
A range of treatments are available to treat affected superficial veins that have formed varicose veins.

Your assessment and treatment
At Premier Vascular we are able offer a one-stop consultation including a duplex ultrasound scan, and a full range of treatments. We are pleased to offer a choice of appointment times and convenient locations.

• Initial consultation and assessment: a one-stop duplex ultrasound scan with a qualified sonographer under the supervision of a vascular surgeon.
• Follow-up clinic appointments as required.
• Leg ulcer review by an experienced vascular nurse specialist to help ensure dressings are applied in an appropriate and timely way.
• Reflux treatments: the full range of treatments for varicose veins, including ultrasound guided foam sclerotherapy, VNSUS Fast RFA closure, endovenous laser treatment, and open surgery. See ’For more information’ on page 6 for leaflets on advice and details of treatments available.

After treatment: caring for your leg ulcer
Venous ulcers may take a fairly long time to heal. But you can help yourself with some practical and lifestyle changes to help the healing and to prevent the ulcer from recurring.

• Wear compression stockings during the day or as advised.
• Ensure that your dressings are non-adhesive.
• Elevate your legs whenever possible.
• Avoid standing or sitting in the same position for long periods.
• Exercise: walking can be beneficial.
• Wash your legs in plain water.
• Use olive oil as a moisturiser to help prevent skin dryness.

For more information
The following leaflets provide general information and advice about varicose veins and details on the different treatments available.

• Varicose veins and their treatment
• Endothermal ablation for varicose veins
• Foam sclerotherapy for varicose veins
• Surgery for varicose veins

For additional information and guidance see NICE: National Institute for Health and Care Excellence
www.nice.org.uk/guidance
www.nice.org.uk/guidance/cg168/chapter/1-recommendations
cks.nice.org.uk/leg-ulcer-venous

Contact us
Premier Vascular:
Mr Martin Claridge and Mr Donald Adam, Consultant Vascular and Endovascular Surgeons.
To arrange an appointment please contact Secretary Sue Wilcox:
e reception@premiervascular.co.uk
t 0121 244 6279
f 0121 242 3299

Edgbaston BMI Priory & Edgbaston Hospitals
Sutton Coldfield Spire Little Aston Hospital
Solihull Spire Parkway Hospital
Leamington Spa Nuffield Health Warwickshire Hospital

www.premiervascular.co.uk