
What is a leg ulcer?

A leg ulcer is a break in the skin on the leg often caused by a simple knock or injury which does not heal in a timely manner. In most people an injury to the leg will heal without any complications in a week or two, however if there is an underlying problem the break in the skin may increase in size and fail to heal within a defined period of time, which is usually set at six weeks.

What causes a leg ulcer?

The most common underlying cause of leg ulcers is a disease of the veins. This is known as venous leg ulceration and accounts for 80-85% of all leg ulcers. Studies have found that 2% of the UK population will suffer with a venous leg ulcer at any one time.

There are several other less common causes for leg ulceration such as diabetes, rheumatoid arthritis or disease of the arteries, and in some cases two or three different diseases may be causing the problem. Leg ulceration becomes more common with ageing as the blood circulation becomes less efficient. It can take many years for the venous disease to cause leg ulceration.

There are several risk factors for developing leg ulcers and they include:

- Obesity – this increases your risk of high blood pressure which can damage the veins in your legs.
- Immobility – being immobile for a long period can lead to a weakening of the calf muscle so if you do a job which involves standing, try and move around.
- Deep vein thrombosis (DVT) – blood clots that develop inside the leg can damage the valves inside the veins of the leg.
- Varicose veins – swollen and enlarged veins caused by malfunctioning valves in the veins of the legs.
- Injury – including a knock or a fractured bone.

Symptoms of venous leg ulceration

You will have a wound to your lower leg which has been present for more than six weeks. You may also experience:

- Swollen ankles – your ankles may hold the imprint of your finger when pressed, (known as pitting oedema).
- Discolouration or darkening of the skin around the ulcer site, (known as haemosiderosis)
- Hardening of the skin around the ulcer which may make your leg feel hard or look like an upside down champagne bottle, (known as lipodermatosclerosis).
- Small smooth areas of white skin, which may have tiny red spots, (Known as atrophie blanche)

Diagnosing a venous leg ulcer

Your nurse or doctor will carry out some tests to establish what underlying problem is causing your leg ulcer and may prescribe treatment accordingly. One of the tests is called a Doppler study®, this is where the blood pressure in both of your legs is measured at the ankles and compared to the blood pressure in both of your arms.



How does the venous disease cause leg ulceration?

Veins in your body are tubes that carry blood to your heart. The veins in your legs contain one way valves which help pump the flow of blood up your leg every time you move and then prevent the blood from flowing backwards down the leg.

The problem starts when these one-way valves become damaged and are unable to prevent the backflow of blood. This causes an increase in pressure in the veins in the lower leg which forces fluid and blood cells to leak through the walls of small blood vessels called capillaries into the surrounding tissue. This leakage is toxic to the skin and causes it to break down, resulting in ulceration.

You may have noticed that the skin has become discoloured. This brown stain is caused by the blood cells leaking into the skin due to the damaged veins. This is unfortunately permanent but can sometimes fade with time. You may also experience itchiness, this may be caused by the over-formation of skin or venous eczema which may make the leg appear scaly. In most cases regular washing and application of moisturising creams can resolve this.

The veins may also start to bulge and become sore. The pain may be worse at the end of the day when you have been standing for long periods. This could be the first sign of venous disease, even before you see anything on your skin. A family history of venous problems such as varicose veins or being pregnant or obese can add to this and as a result the valves in your veins do not work as efficiently as they should.

Treatment

The gold standard for the treatment of venous disease is elevation and compression therapy. However only after a thorough assessment of the underlying circulation in the leg can appropriate treatment be decided which will be aimed at treating the cause rather than just the wound itself.

Compression therapy is designed for the long term treatment of disorders of the venous system, including, cellulitis and leg ulcers caused by poor circulation in the veins. Very occasionally you may require surgical treatment such as a skin graft or an operation on the veins.

How compression therapy works

Compression hosiery and bandages work by applying a firm, continuous, graduated pressure to the muscles and veins in your legs. When your calf muscle contracts e.g. during walking, your hosiery or bandages will move with the muscle and then return to its original position. By doing this, your hosiery or bandages are able to assist your body's own natural mechanism for returning the blood back to your heart. The compression sock/stocking/bandaging applies the correct amount of pressure at particular points of the leg. The pressure is placed around the ankle and then decreased gradually towards the thigh.

Whatever bandaging or hosiery system is used, they can be left in place for up to one week and should feel comfortable, firm and supportive. If you experience any of the following symptoms, you should remove the outer bandage or hosiery and seek advice from your community nurse, GP, or the Central Treatment Suite.

If you experience these symptoms out of normal surgery hours, you should contact your on call district nurse or the Accident & Emergency department:

- Pins and needles
- Blue or white coloured skin on your toes
- Swelling in your toes
- Unusual pain in your leg, foot or toes
- Excessive itching, burning or irritation

Dressings

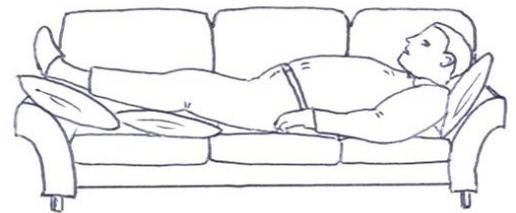
The nurse may use a number of different dressings under the bandages depending on their assessment of the ulcer. The ulcer will be regularly assessed and as a result the dressing may be changed according to your needs at that time. As well as the treatment you will receive by the medical profession, there are important steps you can take to help your ulcer heal and stay healed.

You may be asked to wear a special cast, a device to relieve pressure or a special shoe until your ulcer has healed. You should not wear any other type of foot wear until you have been told by the nurse, doctor or podiatrist that you can wear your own shoes again. If you are prescribed any creams by your nurse or doctor use them as often as requested as this will help to keep your skin supple and healthy.

Elevation

This is one of the most important aspects of the treatment of your leg ulcer. Elevating your legs to above the level of your heart encourages the blood to return to the heart and reduces backflow in the veins. This greatly enhances the healing process.

Elevating your legs on a stool while sitting in a chair will not help the blood to return to your heart as your legs need to be above hip height to be beneficial. So put your legs up whenever you can and as high as you are able. We would advise you to elevate your legs in this position for at least two hours in the morning, afternoon and evening, a total of six hours a day minimum. This will often mean quite a change to your normal daily routine, but it is well worthwhile – the arm of the sofa is good, as the picture indicates. Elevate the lower end of your bed (six inches or so) so that when in bed your feet are a little higher than your head. You can use some blocks for this.



Exercise

Keeping active is another important function to healing your ulcer. Where you are able, go for a walk, the action of walking causes the calf muscle to squeeze the veins and pump the blood back towards the heart. Without this pumping action, all the blood will continue to collect in your legs due to gravity.

Try to avoid standing for long periods of time, for example – ironing, cooking and washing-up. If you do find yourself in a situation where you need to stand, try walking briskly on the spot or lifting your heels as this will help to keep the blood circulating.

Here are some useful exercises to help improve your circulation when sitting or in bed.



Diet

It is important for general health to eat a well-balanced diet. This becomes more important when you are trying to heal your leg ulcer. Try to eat a diet which is high in protein, vitamins and minerals as these are the ingredients necessary for your body to heal.

If you are overweight, it is advisable to try and lose weight as this will help to reduce the stress on your circulation and help your ulcer to heal and remain healed. Try to cut down on sugary and fatty foods, e.g. cakes, biscuits, crisps and chocolate and replace them with fresh fruit, vegetables and carbohydrates such as potatoes and pasta.

Clothing

It is important to wear clothing that does not restrict the return flow of blood through the veins. We would advise you to avoid wearing any kind of tight fitting under or over garments.

Your footwear needs to be well fitting, comfortable and safe. Be prepared to have to wear larger shoes while being treated in multilayer compression but it will be all worthwhile when your ulcer is healed and you can treat yourself to a new pair.

However the majority of normal footwear can be worn with bandages. Lace ups or trainers that can expand easily to accommodate them are often the better than slip on shoes. It is normally a good idea to bring these with you when you attend for an assessment.

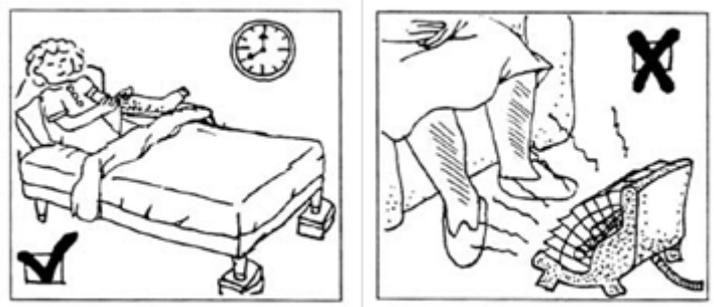
How long will it take the ulcer to heal?

It has usually taken many years for the venous disease to cause ulcers, so it's not surprising that the ulcers may take a long time to heal. Although venous ulcers can heal up within 3-4 months, a small proportion will take considerably longer 12 months or more. If your leg ulcer does not heal you may be referred to other specialist services for more in depth assessments.

Ensure that you keep your bandages in place all the time. Do not remove them for personal hygiene. There are special aids which can be purchased to enable you to continue with your normal hygiene regime.

When your ulcer has healed

Once your ulcer is healed, it does not mean that your problems are over. Although the skin is intact, the underlying problem with the veins remains and so you must take precautions to prevent the ulcer recurring. You will need to continue to control any problems with your veins and, for this reason; it is advisable that you wear graduated elastic support hosiery. Your community nurse or GP will be able to advise you regarding hosiery and will measure your leg(s) to ensure the correct fit. It is important to maintain healthy skin by moisturising your legs every day and apply your elastic stockings before you get out of bed or as soon as possible after you get out and do not toast your legs sitting in front of the fire.



It is important that you contact your GP as early as possible if you think that you may be developing an ulcer to your leg as they are unlikely to get better on their own and will require specialist medical treatment.

How to contact us / further information

If you would like any further information, you may telephone either:

- Your GP Surgery.
- Your DISTRICT Nurse.
- Your Podiatrist.
- Central Treatment Suite – 01493 452299.

Feedback

We want your visit to be as comfortable as possible. Please talk to the person in charge if you have any concerns. If the ward/ department staff are unable to resolve your concern, please ask for our Patient Advice and Liaison (PALS) information. Please be assured that raising a concern will not impact on your care. **Before you leave the hospital you will be asked to complete a Friends and Family Test feedback card.** Providing your feedback is vital in helping to transform NHS services and to support patient choice.

TRUST VALUES: We CARE for...
our patients... each other... ourselves

BEHAVIOURS:

- Courtesy and respect
- Attentively kind and helpful
- Responsive communication
- Effective and professional

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 **IN TRAN**
communication for all

The hospital can arrange for an interpreter or person to sign to assist you in communicating effectively with staff during your stay. Please let us know.

For a large print version of this leaflet, contact PALS 01493 453240