What is a venous leg ulcer?
A venous leg ulcer is a wound between the knee and ankle that is slow to heal because of vein problems (Chronic Venous Insufficiency).

Recommended treatment for a venous leg ulcer
Medical grade compression therapy is the recommended treatment for a venous leg ulcer. A wound dressing can help contain ooze from the wound and maintain comfort, but without wearing compression therapy a venous leg ulcer is less likely to heal. Compression therapy applies supportive pressure to the leg. This improves vein problems and assists circulation by supporting the valves in the veins. Compression therapy helps prevent venous blood flowing back down the leg and helps the veins return the blood to the heart. Compression therapy also reduces leg swelling and allows oxygen and nutrients to reach the skin to promote healing.

Compression therapy explained
Compression therapy can be applied in different ways:
- Using special compression bandages (not crepe bandages). There are various types of compression bandages, including: single layer; two layers; or multiple layers. Some bandages include stretchy elastic, whilst others do not stretch.
- Medical grade hosiery. For treatment of a venous leg ulcer hosiery providing a supportive pressure of at least 30mmHg at the ankle is recommended.
- Machines that pump air into a boot applied to the leg.

A qualified health professional can help determine which type of compression therapy will be best for you.

Compression therapy must extend from the base of the toes to just below the knee. It is potentially harmful to apply compression therapy just around the area of the leg ulcer itself.

Compression therapy should only be applied by a health professional trained to do this.

Potential complications and what to report to your health professional
Report any of the following problems to your treating health professional urgently:
- Tingling or numbness or pins and needles in the toes, foot or leg.
- The foot with the compression on becomes unusually cold, pale or blue in colour.
- Persistent pain that is unrelieved by paracetamol and leg elevation.
- Slippage of the compression or formation of ridges in the compression.
- The compression bandages get wet. If hosiery gets wet, change it to a dry garment.
- The wound dressing covering the ulcer comes off accidentally.

If you cannot contact or visit your health professional urgently, it might be necessary to remove the compression until you can seek advice.

Wearing compression therapy
Bandage application techniques vary and can be tailored to suit you. The higher (or greater) the compression, the better chance of healing. Low levels of compression are not as effective and may delay healing.

Compression should feel firm and supportive, but not cause pain. When compression is first commenced there might be a throbbing sensation or slight discomfort for the first few days. As the swelling in the leg reduces, this disappears.

Compression bandages and hosiery need to be kept dry whilst being worn. Special devices to keep bandages dry whilst showering are available from some pharmacies and medical equipment stores or suppliers.

It is important that the foot is not squeezed into shoes as this can cause injury to the foot. Shoes with adjustable straps or clog style shoes with a non-slip sole are recommended.

Compression hosiery should be replaced every 3 to 6 months. Compression bandages should be cared for and replaced (if re-usable) according to the manufacturer’s instructions.
The importance of leg health
The following recommendations apply to anyone with vein problems (Chronic Venous Insufficiency) whether or not they currently have a venous leg ulcer. It is important to follow these recommendations during treatment of a venous leg ulcer and once the ulcer is healed. Even if you have never had a venous leg ulcer but have vein problems, following these recommendations might reduce the risk of getting a venous leg ulcer.

Exercise
Exercise such as walking helps the calf muscle pump blood back to the heart. Walk normally, using a heel-toe action. Avoid shuffling or limping as this does not help pump the blood. Walking is recommended and is an important part of treatment.

Walking whilst wearing compression therapy might improve healing. If walking is difficult or limited, foot and ankle exercises can help e.g. raising the heels up and down whilst the toes stay on the floor.

Your doctor, nurse or physiotherapist can give you further advice. Talk to your treating health professional if you need any further information.

Avoid standing for long periods.

Leg elevation
Elevate your legs as close to hip level as possible when seated to reduce swelling. This can be achieved using a high footstool, another chair or a recliner chair. Elevate your legs on a pillow under the calves when in bed.

If you can, lie on a couch or your bed with your legs elevated for at least a couple of hours a day. This will help reduce leg swelling.

In summary:
- Walk as much as possible and avoid standing for long periods
- If walking is difficult perform foot and ankle exercises
- Elevate your legs when sitting

Diet and nutrition
A healthy diet and maintaining a normal weight is important. If your appetite is poor, or if you are underweight or overweight, talk to your doctor or treating health professional. They might arrange assessment by a dietician.

Being overweight can slow the venous blood flow back to the heart. A healthy diet will also reduce the risk of other conditions such as diabetes and provide optimum energy levels for a healthy lifestyle.

Skin care
The skin around a venous leg ulcer and the affected leg can often be dry and flaky or suffer from eczema. Good skin care including gently washing your legs with a non-soap cleanser and applying a moisturiser regularly will prevent skin drying out (but do not apply moisturiser to the ulcer or between the toes).

Tap water that is safe for drinking is recommended for washing your leg and the ulcer. Your treating health professional might wash your leg in a bowl or, if you can take off your compression independently you can wash your leg and ulcer in the shower. But it is important that the dressing and the compression therapy is replaced immediately after.

Sometimes specialised treatments are needed for treatment of the dry skin or if there is eczema. This can include special bandages or stockings with zinc in them or steroid creams. Steroid creams are only used for a short term as they can cause the skin to become thin.