

Information for patients having Radiofrequency ablation of varicose veins (VNUS CLOSURE®)

Why do I need this procedure?

Everybody has two sets of veins in the legs. These include the superficial and deep veins. Their job is to carry blood towards the heart. The superficial veins run under the skin. There are a number of valves in the veins and these prevent the blood from flowing back. However, if the valves stop working correctly then the blood will flow back into the veins causing them to become large and irregular. These are called varicose veins. Varicose veins do not tend to get better without treatment, and usually get worse with time. If left untreated, irritation of the skin around the ankles with swelling of the feet (worse at the end of the day) and discolouration may occur. Finally, eczema, phlebitis (inflammation of the vein) and ulceration may occur. Large varicose veins are easily damaged by a minor injury resulting in profuse bleeding. Many people, however, only suffer the cosmetic embarrassment of visible veins.

VNUS CLOSURE® procedure

The Closure® procedure is performed on an outpatient basis. Using ultrasound, your physician will position the Closure® catheter into the diseased vein through a small opening in the skin. The tiny catheter powered by radio-frequency(RF) energy delivers heat to the vein wall. As the thermal energy is delivered, the vein wall shrinks and the vein is sealed closed. Once the diseased vein is closed, blood is re-routed to other healthy veins.

What are the benefits of this procedure?

It is a minimally invasive treatment alternative with less pain and less bruising when compared to traditional vein stripping surgery. It is to be carried out as Day Surgery under local anaesthesia. It's a faster procedure compare to other varicose vein operations. Many patients notice an immediate relief of symptoms such as pain, leg heaviness and fatigue. You can resume normal activities within 1-2 days. The full benefits of the procedure may take 1-2 weeks. Patient also benefits from good cosmetic outcome with minimal or no scarring, bruising or swelling. 81% of VNUS Closure patients returned to normal activities within 1 day compared to 47% of vein stripping patients.

VNUS Closure patients returned to work more than 1 week sooner than vein stripping patients

Are there any alternatives to this procedure?

One of the alternative procedures we can offer is to tie the veins in the groin and then strip and remove them. This has to be done under a general anaesthetic but the risks of bleeding, bruising and nerve injury are slightly more with this technique.

Another surgery is Foam Sclerotherapy which involves injecting a chemical into the affected vein which causes a localized inflammation thus causing it to block. Foam sclerotherapy is slightly different from liquid sclerotherapy as the liquid is mixed with air to create a foam.

Alternatively you can wear wearing elastic compression hosiery (stockings) will help to relieve the swelling in your leg. Your leg will need to be measured to make sure you

have the correct size stocking fitted, and the stockings will have to be worn every day. It is important that you apply cream to your legs regularly to prevent dryness. You should exercise regularly to encourage blood to flow back up your leg.

How do I prepare for the procedure?

You will be spoken to about what the procedure consists of, and the risks and benefits of having the procedure. A Duplex scan will be performed. This is similar to an ultrasound scan in which a jelly is placed on your leg and a detailed picture is charted to show the veins and valves in your leg.

Risks and complications?

As with any medical intervention, potential risks and complications exist with the procedure however most people are not affected. After surgery, it's possible to develop a blood clot in the deep veins in the leg(DVT). In most cases this is treatable, but it can be a life-threatening condition. Compression stockings and blood-thinning injections may be used to help prevent DVT.

Damage to the nerves in the skin, resulting in small numb patches on your legs. The feeling usually returns but may take a few weeks or months.

It is also possible to develop an infection at the operation site however it can be treated with antibiotics.

Patients report minimal to no scarring, bruising, or swelling following the procedure.

What happens after the procedure?

Following the procedure, a simple bandage is placed over the insertion site, and additional compression may be provided to aid healing. Move around frequently, a minimum of 30 minutes daily. Avoid heavy/strenuous exercise for a few days. Avoid prolonged sitting or standing. You need to wear compression stockings for up to 2 weeks.

How soon will I be back to normal?

You will be walking immediately following the procedure, and resume normal activities within one day. As stated earlier, many patients notice an immediate relief of symptoms such as pain, leg heaviness and fatigue. The full benefits of the procedure may take 1-2 weeks.

Prevention

Anyone can develop varicose veins, so it may not always be possible to prevent them.

Although there are no scientifically proven ways to prevent varicose veins, the following suggestions may be useful:

- avoid standing still for long periods of time
- take regular exercise, such as walking
- maintain a healthy weight
- wear properly fitted compression stockings to prevent further deterioration of existing varicose veins