

# INFORMATION FOR GENERAL PRACTITIONERS ON OUTPATIENT VARICOSE VEIN TREATMENTS BY ENDOVENOUS LASER THERAPY (EVLA) AND FOAM SCLEROTHERAPY



EVLA and foam sclerotherapy are relatively new outpatient based interventional radiological techniques developed to replace surgery (tying and stripping) for the treatment of typical (even very large) varicose veins, reticular veins and thread veins.

You will be aware of the results of surgery for varicose veins. Generally it is very successful and most patients are pleased with the results. It is however far from perfect. Most cases are performed under general anaesthesia and some require a hospital stay. Although some patients get back to work and other activities within 2 weeks it has recently been shown that many take up to 6 weeks to return to work. Surgery requires incisions with subsequent scars and risks of infection. Recurrence is a major problem due, it is thought, to neovascularisation as a result of the groin dissection. NICE have recently issued guidance on management of varicose veins of the legs that recommends that all treatment is undertaken using these new methods of Endovenous Thermal Ablation. <https://www.nice.org.uk/guidance/cg168>

## Interventional Radiologists

We have several different vascular specialists working for us in our clinics. Some of these are Interventional Radiologists others are Vascular Surgeons who have undergone specific training in these Interventional radiological techniques. You may not be used to referring your patients to a radiologist for anything but a diagnostic test but you will be familiar with the results of treatment carried out by interventional radiologists in acute hospitals. Common conditions which are, more often than not, treated by interventional radiologists include peripheral vascular disease (angioplasty and stenting) obstructive jaundice (stenting), kidney stones (percutaneous nephrolithotomy), varicoceles (embolisation), uterine fibroids (embolisation) to name but a few. The key features of interventional radiological techniques are minimal invasion and image guidance, enabling many previously very major operations to be replaced by out-patient or short stay interventions carried out whilst the patient is fully awake. Patients recover quicker and suffer fewer complications than with traditional surgery.

With expansion in the range and complexity of treatments provided many interventional radiologists have established out-patient clinics and admitting rights. Examples of conditions now been managed primarily by interventional radiologists in this way range from the very simple (e.g. varicoceles /embolisation) through routine (e.g. osteoporotic vertebral collapse/ vertebroplasty; uterine fibroids/embolisation) to highly complex (e.g. arteriovenous, malformations/embolisation, carotid artery atherosclerosis/stenting, many common cancers/RF or cryotherapy ablation).

Interventional radiologists have for many years been intimately involved in both diagnosis and treatment of many different varicose venous problems. They undertake or supervise most colour duplex scans of the legs on which accurate diagnosis of venous reflux depends. Embolisation is the first line therapy in most hospitals for treatment of varicose veins of the scrotum (varicocele), vulva, and clitoris and also in many cases of pelvic pain syndrome due to pelvic varicosities. Colour duplex scanning is also bringing to light many patients with varicose veins of the thighs where the highest point of reflux is in the ovarian or testicular veins and these too are best treated by embolisation.

## EVLA/ VNUS/ Foam Sclerotherapy

Interventional radiological techniques have recently been developed for the treatment of 'standard' varicose veins. These include EVLA, VNUS and foam sclerotherapy all of which have been frequently (and very positively!) featured in the press over the last few years.

EVLA and VNUS are very similar but we concentrate on EVLA as it offers some advantages (lower cost, greater versatility) but no drawbacks compared to VNUS. Both techniques use a disposable device (EVLA-laser fibre, VNUS-RF heating probe) to destroy the wall of the great saphenous vein and close it off 'in situ'.

Foam sclerotherapy uses STD sclerosant mixed into a foam with air and injected into the vein to be destroyed. The foam displaces the blood rather than be diluted by it like normal liquid sclerosants and deposits a high concentration of STD on the vein wall.

Both EVLT and foam sclerotherapy are guided by duplex ultrasound scanning to ensure the vein wall destruction is effective, accurate and safe.

Although there are proponents of using just foam sclerotherapy to destroy the main great saphenous vein (GSV) and its branches evidence shows that the laser is most effective at destroying the main truncal veins (e.g. GSV and short saphenous vein SSV) and the foam sclerotherapy technique is best used as an adjunctive therapy to destroy any unsightly veins which remain after laser destruction of the main veins.

Our standard treatment for varicose veins, reticular veins or thread veins shown on duplex ultrasound to be due to GSV or SSV incompetence is to first destroy the GSV or SSV or both by EVLT. This is done under local anaesthetic as an outpatient. It is painless apart from the sting of the local anaesthetic. It normally takes less than an hour. The patients are encouraged to walk (home if reasonably near) immediately afterwards and get back to normal activities. Stockings are worn for one week. If at follow up in 6-8 weeks there are any remaining worrying veins these are then injected with foam under ultrasound guidance.

## Contraindications

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Although EVLT is suitable for most patients with varicose veins there are a number of relative contraindications and it is important for the interventional radiologist to be aware of these.

1. Significant systemic illness
2. Inability to ambulate
3. Pregnancy
4. General poor health
5. Hypercoagulability

## Results

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The results of EVLT/ foam sclerotherapy are very impressive. The largest published series to date of 500 legs shows 98% success at closing the GSV and less than 7% recurrence up to 3 years. All but one patient was satisfied with the treatment.

Complications were minor. Bruising occurred in 24% and tightness along the course of the GSV in 90%. There were no skin burns, parasthesiae, DVT or other major problem.

We have now undertaken over 10,000 treatments and have had only one serious complication which was a DVT.

## Insurance companies

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BUPA and all the other UK insurance companies have approved EVLT as a safe and effective treatment for varicose veins and we are registered with all companies.

## Prices

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Although the equipment required to undertake these techniques is very sophisticated and expensive the fact that they are undertaken as outpatient procedures without general anaesthesia has enabled us to keep fixed cost prices for uninsured patients below equivalent surgery at £1695 for one leg and £1995 for two legs in all clinics outside of London.

The procedures are particularly useful for recurrent veins after previous surgery. Such veins are notoriously difficult to deal with by surgery.

## Further Information

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Further information can be obtained from [www.veincentre.com](http://www.veincentre.com).

Specific queries can be addressed to [patientcare@veincentre.com](mailto:patientcare@veincentre.com) and these will be passed onto our Medical Director.