



Patient Information

Ultrasound-Guided Foam Sclerotherapy

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- Varicose veins are a sign of underlying venous insufficiency and affect 20-30% of adults. Long saphenous vein insufficiency is the most common form of venous insufficiency in people presenting with symptoms. People with venous insufficiency may have the following symptoms: fatigue, heaviness, aching, throbbing, itching and cramps in the legs. Chronic venous insufficiency can, in some patients, lead to skin discoloration, skin changes and ulceration.
- The main treatment options are sclerotherapy, thermal ablation using laser or radio-frequency, surgery (ligation, stripping, phlebectomies), mechano-chemical ablation (ClariVein) and Cyanoacrylate glue. Ultrasound-guided foam sclerotherapy for varicose veins is a variation of established liquid sclerotherapy techniques. It uses a sclerosant solution that has been transformed into micro-foam by being forcibly mixed with air or, preferably, carbon dioxide plus oxygen. The latter gas combination is more physiological, completely soluble in blood and, therefore, potentially much safer than injecting foam made with air. We always use foam made with carbon dioxide plus oxygen unlike many other clinics.
- The procedure is performed under local anaesthesia. A needle is inserted into the main affected superficial vein and is monitored using ultrasound imaging. Sclerosant foam is then injected and monitored. Once the foam has filled the entire main superficial vein, the top end of the vein may be compressed to keep the foam in the superficial veins. The foam causes inflammation of the vein wall, obliteration of the vein's lumen and vein occlusion.
- Further injections may be given during the same session to make sure that all the varicose veins have been completely filled. If any vein is incompletely treated, further injections can be given in a second session. In most cases a single treatment is sufficient; in about 10-15% of cases we need to repeat the treatment to deal with any remaining veins.
- Usually only one leg is treated at one sitting. Also, if more than one venous system within each leg is affected then multiple treatments may be required in each leg. The potential need for several clinic visits should be borne in mind.
- The National Institute for Health and Clinical Excellence (NICE) published updated guidance in February 2013. Current evidence on the efficacy and safety of ultrasound-guided foam sclerotherapy for varicose veins is adequate. Studies have shown the treatment to be successful in over 90% patients. The rate of symptomatic varicose vein recurrence ranges from 4% to 22% at 5-year follow-up. Current evidence suggests no clinically significant differences between foam sclerotherapy and other treatment modalities for varicose veins in the short to medium term. Further studies regarding long-term efficacy are ongoing.
- The potential complications of this procedure are deep vein thrombosis, thrombophlebitis, and allergy. Temporary chest tightness, dry cough, headaches and visual disturbance can occur occasionally but usually resolve within minutes. Very rare but significant complications include myocardial infarction, seizures, transient ischaemic attacks and stroke. Only a few cases of stroke have been reported in the world literature using air-based Foam but not with oxygen / carbon dioxide. All cases had complete or near complete recovery. While millions of Foam Sclerotherapy treatments have been performed, no deaths or stroke with significant after effects have been reported to date.

After Treatment

- After your procedure you will need to have a good brisk walk for 15 minutes. For the first week at least we ask that you walk around for a minimum of 5 minutes every hour that you are awake, and avoid standing still for long periods of time. When not mobilising, try to sit down and elevate your leg if possible. Avoid running and/or prolonged kneeling or squatting for the first 10 days.
- The stocking is an important part of the foam injection treatment, and must remain in place for a minimum of 5 days to keep the vein closed. Following removal of the stocking you do not need to use any compression, but you may feel more comfortable wearing a light support stocking for a while.
- Please avoid getting your stocking wet. A waterproof overstocking will be provided which will make showering possible. Once the stocking has been removed you may take a bath or shower.
- Avoid travelling in confined circumstances for long periods of time. If going on a long journey, try to break it into short sections and have a good brisk walk for 5 minutes every hour or so. Long-haul flights (>4 hours) should be avoided for 4-6 weeks after treatment.
- Walk as much as you wish but within any discomfort.
- If you do experience some pain or tenderness in your leg, take two pain killing tablets, such as Paracetamol, and keep active. Some discomfort is expected after the third day or so. Anti-inflammatory gels are sometimes useful for local tenderness once the stocking has been removed. Arnica cream is thought by some to help early resolution of bruising.
- You may drive once you feel able to do so, and your insurance company is happy to cover you (insurance companies have differing policies with regard to driving after surgical and other medical procedures and, if in doubt, you are advised to check with them). **Please note**, we advise that you do not drive on the day of your procedure.
- You should be able to return to normal physical activities as soon as possible after the procedure and most people require little, if any, time off work.
- When the stocking is removed it is usual for the veins to have become lumpy and slightly tender under the skin. The overlying skin may show some bruising or become faintly discoloured brown. If these problems occur, they should resolve over several weeks.
- About 10-15% people may suffer from some degree of thrombophlebitis. This is where the treated veins become very hard, very painful, red and tender. This normally responds to a course of Ibuprofen or similar anti-inflammatory tablets.

Also, continuing to wear a compression stocking may help. Hirudoid cream can also help.

- If the whole leg swells, or becomes excessively painful or just doesn't feel quite right, please contact either Mr. Ashley's secretary (01752-707090) or your GP for advice.
- After a few weeks there may still remain some hard lumps and bruising where the veins used to run, THIS IS NORMAL and will resolve; it indicates that the treatment has worked well. A small number of patients may get some pigmentation developing in the skin overlying the treated veins. This tends to fade with time but can take several months. Occasionally this may not resolve completely or some new thread veins (spider veins) may develop.
- You will be asked to return to the clinic approximately four to six weeks following your procedure to check the treated veins. In most cases a single treatment is sufficient; in about 10-15% of cases we will need to perform a secondary treatment to deal with any remaining veins.