

Sclerotherapy

What is sclerotherapy?

Sclerotherapy or injection of varicose veins is a procedure designed to improve symptoms of your varicose veins. The veins are injected with a solution called a sclerosant which damages the internal lining of the vein and causes blood clotting within the vein. In time, your own body will then destroy the vein and it will disappear. The solution normally used for this procedure is called sodium tetradecyl sulphate (STD) and is available in different concentrations depending on the size of the vein being treated.

What is foam sclerotherapy?

Normally STD is injected as a solution directly into the vein to be treated. Foam sclerotherapy involves making small volumes of the solution into foam by rapid mixing and agitation with a small volume of air. This can then be used to treat some of the larger underlying abnormal veins which would not normally be treated with conventional sclerotherapy.

Are my veins suitable for foam injection sclerotherapy?

Varicose veins involving isolated veins in the leg or involving the long saphenous vein or short saphenous vein are suitable for this form of treatment (most varicose veins).

If you have very extensive and very large varicose veins, then you may do better with surgery rather than sclerotherapy. If you have any underlying blood clotting tendency it may not be advisable to have sclerotherapy.

What does the procedure involve?

Depending on the number of varicose veins you have, you may need 2 or 3 sessions of treatment, and occasionally more than this. Two or 3 smaller needles (called butterfly needles) will be inserted into the visible varicose veins in the leg and these will be similarly flushed. The foam solution will be injected in small volumes at a time into each of the needles. Whilst this is being done you will be asked to bend your ankle up and down in order to increase the blood flow in your deep veins.

You may experience some slight stinging as the foam is injected but it is usually painless. The passage of the foam in the vein will be monitored by ultrasound scanning and the foam injections into each needle will be repeated 2 or 3 times.

Once enough foam has been injected, the needles will be removed and a dressing will be applied to your leg followed by a stocking. The leg will then be bandaged in order to compress the treated veins.

What happens after treatment?

You should keep the dressing, bandage, and stocking on continuously for 5 days. After this you may remove the dressing and bandage and then replace the stocking which should be worn for a further 5 days during the daytime. If you find the stocking comfortable and wish to wear it for longer, this may be helpful.

You should do plenty of walking and may generally do most normal activities without any problem. If in doubt ask your doctor. However you should not drive on the day the procedure is performed, just in case you experience any visual disturbances (see below).

Will I need further treatment?

It is unlikely that all your varicose veins will improve after one set of injections and you may need several treatments. You will be seen again in a few weeks time and further injections can be performed at that stage. Some of the untreated veins may have shrunk at that stage.

What are the complications?

Superficial thrombophlebitis: Most people will experience some hard lumps which form in the treated veins. These are areas of blood clotting in the treated veins. This is nothing to worry about but may be associated with inflammation and discomfort. If this occurs, anti-inflammatory pain killers may help. These lumps will eventually subside and disappear but this may take several weeks or months.

Brown pigmentation of the skin: This can occur following superficial thrombophlebitis described above and can be permanent. However it will usually fade over a period of several months and may disappear completely.

Deep venous thrombosis (DVT): If the solution passes into the deep veins there is a risk of thrombosis. This may be very minor with no symptoms or a major blood clot with a risk of a pulmonary embolus (passage of a blood clot to the lungs). It is for this reason that only small volumes of the foam are injected at a time and the ankle is exercised in order to maintain good flow in the deep veins. You should avoid flying for 6 weeks after the procedure to reduce this risk.

Thread veins: Some patients can develop new thread veins around the site of sclerotherapy.

Recurrent and residual varicose veins: If you have any remaining varicose veins, it is usually possible to inject these at your next visit. However if you have a lot of very small varicose veins it may not be possible to eradicate all of these. It is possible that the treated vein could reopen. If this does happen it would be possible to treat the vein again, either by further injection or by surgery.

Skin ulceration: If the solution does not go into the vein but goes into the surrounding tissues it can cause a small ulcer of the skin. This will heal up but this may take several weeks and could leave a scar.

Allergic reaction: Allergy to the solution used is rare but can occur. If you have any allergies you should inform your doctor.

Visual disturbance: There are reports of temporary visual disturbance (floaters in eye) with foam injections. It is not certain why this occurs but it is more common in people who suffer from migraines.

Stroke: There have been a very small number of reported instances of a stroke occurring after foam sclerotherapy. However this is out of many hundreds of thousands of treatments that have been performed worldwide.