

Sclerotherapy

A guide to Sclerotherapy for leg veins

Sclerotherapy is very safe, and has an exceedingly low incidence of allergic reactions. The sclerosant used in the procedure (fibro vein or polidocanol) is generally considered less painful and more effective than hypertonic saline.

As you progress with your treatment, you'll notice successfully treated veins darken and gradually fade as the body gradually removes them.

What does the procedure involve?

Each session involves multiple fine injections that are usually well tolerated. The average number of treatments required is between 3 to 6 sessions, at weekly to monthly intervals. Stockings are required for at least one week after each treatment session. A 30 min daily walk is also required for 1–2 weeks after treatment. A non-invasive ultrasound is often used to help direct the injections making the treatment safer and more effective, also known as ultrasound-guided sclerotherapy.

What happens after treatment, and how long will the results last?

The treated veins will darken and look worse for the first month. Smaller veins will start to clear by about 2–3 months while larger varicose veins may take up to 6 months to disappear. When the veins are effectively treated they do not recur. However, if you are predisposed to leg veins, additional veins may crop up over time and can be similarly treated. Patients with a family history of varicose veins have genetically weak veins that will show with age and maintenance treatment may be necessary from time to time.

What are the unwanted side effects of sclerotherapy?

The 2 most common unwanted side effects are staining and matting.

Staining results from excessive trapped blood (iron in blood) within the treated vein that can stain the skin a brownish colour. This is almost always temporary and may persist for up to several months.

Matting is the development of very fine compensatory vessels over the treated vein as a result of the body's temporary attempt to replace the vein that's being destroyed.

Up to one third of patients may suffer from mild cases of matting and staining. Fortunately they are temporary and will resolve with time (3–6 months). In severe cases, staining may last up to a year or more and some cases of matting may persist indefinitely.

Compression Stockings

The recommended timeframe for wearing compression stockings following each sclerotherapy treatment:

A: Micro Ultrasound Guided Sclerotherapy (MUGS)
= 1 week (minimum)

B: Ultra Sound Guided Sclerotherapy (UGS)
and EndoVenous Laser Ablation (EVLA)
= 2 weeks (minimum)

It is okay to extend the stocking time for additional support to the leg(s) if desired.

Wear the stocking to bed on the first night following treatment. Thereafter the stocking(s) should be worn only during the day and can be removed at bedtime. You can also remove them for showers. Make sure that showers are brief (less than 5 minutes) and not too hot. Short lukewarm showers are best.

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Patient Information and Informed Consent

This form is designed to provide you with the information you need to make an informed decision on whether or not to have sclerotherapy. We've tried to include all possible side effects of this treatment even those which are extremely rare.

What are the possible side effects of this treatment?

Stinging sensation. The sclerotherapy procedure is not painful. You may feel the occasional pin-prick but overall, the procedure is extremely well tolerated.

Bruising. Following the treatment, you may notice some bruising that will settle down after a few days. The use of aspirin or other anti-inflammatory tablets (such as nurofen), vitamin E, fish-oil and other blood thinning agents (warfarin) can increase bleeding and bruising, which is only a temporary issue.

Darkening of the veins. The treated veins tend to darken after sclerotherapy, which indicates successful treatment. The darkened (treated) veins will start to fade from 3 weeks onwards and will progressively clear over the subsequent months (3–6 months).

Staining of the skin. A small group of patients may have brown discolouration of the skin along the treated veins. This is due to deposition of iron pigment (haemosiderin) in the skin. It is important to stop taking iron supplements before and during vein treatment. If this discolouration occurs it may take up to a year to resolve, but in rare cases it may take many years to resolve.

Matting. Occasionally, tiny capillaries may develop following treatment. They usually resolve within 4–6 months but may take years to resolve. Contraceptive or hormone replacement medications may increase the likelihood of matting.

Trapped blood. When larger veins are treated, trapped blood may develop naturally within segments of the treated vein. Trapped blood presents as minor tender lumps along the treated vein. Most cases of trapped blood will resolve with time without intervention. When indicated, releasing the trapped blood with a needle will flatten out the lumps more quickly. Some areas of trapped blood may become inflamed and painful – also known as 'hot spots' or phlebitis. Hot spots will settle with short courses of anti-inflammatory tablets (eg. Nurofen) along with compression stockings.

Ulcer. Rarely, small arterioles adjacent to treated veins go into spasm resulting in the formation of a small ulcer. The ulcer will heal after 2 or 3 months but may leave a scar.

Deep vein thrombosis. This is a rare complication resulting in blood clots in the deep veins (deep vein thrombosis, DVT). The clots can break off and travel to the lungs resulting in a

potentially life threatening condition called pulmonary embolism. Patients with underlying genetic 'stickiness' of the blood (thrombophilia) are more susceptible to clots. If you or any family members have suffered from clotting problems, a pre-treatment blood test to identify this genetic risk may be necessary. Wearing compression stockings and keeping active after sclerotherapy can help prevent DVTs. We also advise against unnecessary long distance travel (air, car, coach) or extensive periods of immobility within 4 weeks before or after any major procedures. Contraceptive or hormone replacement medications can also increase the risk of clotting especially in smokers and individuals with genetic thrombophilia.

Allergic reaction. Very rarely a patient may be allergic to the injected solution. Allergies when they occur tend to be non-life threatening but in rare instances, severe allergic reactions (anaphylaxis) can be fatal. If you have a history of allergies please let the doctor know. Patients who react to one type of vein solution can usually be successfully changed over to a different solution.

Numbness and altered sensitivity. Very rarely, an area of skin over a treated cluster of varicose veins may feel numb. This is due to temporary inflammation of the adjacent sensory nerves, and usually resolves within 6–9 months.

Swelling. After the treatment of large veins, some temporary swelling may follow. It settles with the use of compression, elevation of the leg and walking but it may last for a few weeks to several months.

The effect of micro-bubbles. Coughing, headaches, migraines and transient visual disturbances and weakness may uncommonly follow injections using foam due to the temporary effects of the micro-bubbles. These are transient (lasting 2–3 hrs) and have no long term consequences. Individuals with a 'hole-in-the-heart' (Patent Foramen Ovale or PFO) may experience neurological symptoms such as weakness and slurring of speech following sclerotherapy. Chest tightness and shortness of breath may also occur in patients with a hole in the heart resulting in the micro-bubbles lodging in the coronary (heart) vessels. These are transient with no long term problems. There are also documented episodes of strokes after sclerotherapy in patients with PFO, but the cause and effect of these rare cases have not been fully established.

Pregnancy and breast-feeding. There have been no studies to show whether sclerotherapy solutions harm the pregnancy or the breast-feeding baby. In general we do not recommend this type of treatment during pregnancy or breast-feeding. When patients fall pregnant, the treatment is suspended with no adverse effect on the ensuing pregnancy.

What solution is injected?

Modern registered sclerosants in Australia include Sodium Tetradecyl Sulphate (STS; Fibrovein) and Polidocanol (Aethoxysklerol). These are available in liquid form but foam is routinely used for larger veins. The foam is prepared fresh without preservative or additives during the procedure. Using the product as foam (rather than liquid) is 'off label' but international experience and research shows that it is safer and a more effective option when compared with liquid.

What are the possible complications if I do not have the treatment?

In the case of large varicose veins, spontaneous inflammation or blood clots may develop in the deep or surface veins with the associated possibility of the clot traveling to the lungs. Also, skin changes including increased or decreased pigmentation, hardening of the skin and underlying fat (lipodermatosclerosis) and eventually ulcers may develop in the lower legs. Rarely, these ulcers may become cancerous.

Are there other types of procedures to treat varicose and spider veins?

Spider veins: Laser treatments are not consistently effective on leg spider veins. Laser therapy may be attempted only after the leg has been treated with sclerotherapy. Spider veins on the body and the face can be effectively treated by laser.

Varicose veins: Surgery is an option for certain patients with large varicose veins. The operation usually consists of a hospital stay and is usually performed while the patient is under general anaesthesia. Risks of vein stripping and/or ligation include permanent nerve paralysis in a small percentage of patients, deep vein thrombosis and pulmonary embolism, infection, and scarring. Vein surgery is occasionally done in the surgeon's rooms using local anaesthesia and very fine small hooks. This method is called Ambulatory Phlebectomy and may have a faster recovery time with less risks compared to surgery under general anaesthesia.

Endovenous Laser Therapy (EVLT) is a preferred treatment option in patients with larger veins or difficult veins where recurrence is more likely. EVLT has the highest rate of treatment success with minimal side-effects when compared with surgery or sclerotherapy.

Compression Stockings. If none of the options are suitable for you and you wish to have no intervention, we recommend you wear compression stockings. These can prevent further deterioration of your leg veins.

Does sclerotherapy work for everyone?

Done correctly, sclerotherapy is a very successful treatment. In our clinics more than 90% of patients are significantly cleared. The success of the treatment depends on your age, severity of the disease, your speed of healing, your other concurrent medical conditions, and how well you follow the Doctor's instructions. It is important to remember that due to genetic and hormonal factors you may develop new veins in the future. These can be treated as they appear and regular follow-up is recommended.

How many treatments will I need?

The number of treatments needed to clear or improve the condition differs from patient to patient. One to six or more treatments may be necessary. The average is four treatment sessions for both legs. At your first consultation, the doctor will give you an estimate of the number of treatments you may need.