



SCLEROTHERAPY / VARICOSE VEINS

Some patients find the appearance of varicose veins and telangiectases (spider veins) distressing. Medical practitioners sometimes underestimate the importance of this and its potential impact on lifestyle (for example, embarrassment and avoidance of social situations and clothing that expose the legs.) Many patients fail to seek treatment because they believe (or have been advised by friends or even their doctor) that surgical stripping is the only treatment available and they wish to avoid surgery, general anaesthesia, scarring, expense or time off work. Some who inquire about treatment are wrongly informed that if their veins are not amenable to surgery then there is nothing that can be done.

WHAT ARE SPIDER AND VARICOSE VEINS?

Normally blood travels through healthy veins up to the heart. Spider and varicose veins, however, are abnormally dilated veins that cannot perform their function. Essentially valves that normally prevent reflux of venous blood down the vein by gravity have ceased to function properly.

CAN VEIN PROBLEMS BE PREVENTED?

There is no known method of prevention. Wearing specialised venous support stockings may prevent some dilated blood vessels from developing in some people. Maintaining a normal weight, regular exercise, avoiding constipation and avoiding wearing high-heeled shoes may also be helpful.

HOW ARE VESSELS ON THE LEGS TREATED?

In the majority of cases a procedure called "Sclerotherapy" is used. This involves injecting a solution, called a sclerosing solution, directly into the blood vessel with a very fine needle. This procedure has been used for spider veins since the 1930's. The solution irritates the lining of the vessel causing it to swell and stick together. Over a period of several months the vessel fades from view, eventually becoming barely or not at all visible. Depending on its size, a single blood vessel may have to be injected more than once. Because larger veins (reticular veins) often underly spider veins these vessels must be treated as well.

DOES IT HURT?

Different doctors use different solutions. The amount of discomfort you may feel will depend on the skills of the doctor, the solution used, the concentration of the solution and most importantly your pain tolerance! In each treatment session many vessels are injected but normally the treatment involves minimal discomfort because of the tiny diameter of the needles. We generally use a sclerosant named Polidocanol that is very well tolerated by most patients.

DO I NEED TO WEAR BANDAGES OR STOCKINGS?

Yes for at least one week. This minimises the formation of haematoma (trapped blood) and pigmentation, reduces the number of treatments necessary, the risk of deep venous thrombosis (blood clot) and the possibility of recurrence. Depending on the opinion of your doctor and the severity of the disease, this can range from 3 days to 3 weeks.

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HOW SUCCESSFUL IS SCLEROTHERAPY?

After several treatments most patients can expect at least a 70 percent improvement in the appearance of their legs. You initially look worse because of bruising. The improvement may be very gradual with some vessels taking more than 3 months to show maximum benefit. Perfection is seldom achieved (but always strived for!).

DOES MEDICARE COVER THE TREATMENT COST?

Medicare provides a very small rebate for Sclerotherapy of symptomatic varicose veins larger than 2.5mm in diameter. However where a Medicare rebate applies there is no GST applicable and with the Medicare safety net provisions some patients have found that a significant percentage of the full fee is rebated if the safety net for a patient or family has been reached.

WHAT CAN I EXPECT FOLLOWING MY TREATMENT?

- Red raised areas at the sites of injection. These should disappear within a day.
- Bruises at injected site. These will disappear in a few weeks and are probably related to the fragility of blood vessel walls. Blood trapped in the sclerosed vein may cause the vein to become more noticeable in the first few weeks following treatment, and is an early sign that the treatment has been successful.
- Aching in the leg for the first day or two following treatments. This is usually relieved by walking. You may also take Panadol to relieve this aching.

POSSIBLE SIDE EFFECTS OF SCLEROTHERAPY:

Even when a highly experienced physician is performing the treatment, there are a number of possible side effects, including the following:

- **Staining of the skin:** This is the appearance of brown marks on the skin after treatment. Some studies showing an incidence as high as 16% at 6 months and 5% at 2 years. These pigmented areas are mainly composed of haemosiderin, an iron pigment stored in the blood. This is more likely to occur in patients who have larger veins treated or those patients who have a lot of bruising. In most cases they disappear completely within a year. In order to minimise this side effect we advise that you do not take any iron supplements (including most multivitamins) before, during or for 3 months after the course of treatment. You should also not be taking Aspirin, Vitamin E or non-steroidal anti-inflammatories such as "Voltaren" or "Naprosyn". These medications increase your risk of bruising.
- **Matting:** This is the development of networks of fine red blood vessels near the sites of injection of larger vessels, especially on the thighs. It is reported that about 10% of patients develop these. Most resolve spontaneously, some resolve with injection treatment, and a few persist. Matting is more common in patients with extensive surface veins, deep vein problems and those patients who have a family history of surface veins and in obese patients who have poor muscle tone.

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- **Migraines:** Patients with a personal or sometimes inherited predisposition to migraines may develop migraine symptoms including visual disturbances and or throbbing headache.
- **Ulcers:** Very occasionally there is the formation of small, painful ulcers at treatment sites within 2 weeks of injection. These may occur because the solution has escaped into the surrounding skin and sometimes they occur because there is an abnormal connection between small veins and arteries. They are more common in patients who smoke cigarettes. They heal slowly and may leave a small pale scar.
- **Allergic reactions:** Although on rare occasions (2 per 10,000) such reactions may be serious, they can be treated by immediate injections of adrenaline. Less serious reactions are treated with antihistamines. Minor rashes require no specific treatment but you should inform the doctor if they occur. Rarely, inflammation of the gums (gingivitis) appears as a reaction to a specific sclerosing solution. If this occurs, a different solution can be used for subsequent treatments.
- **Phlebitis:** This is an inflammation of the treated blood vessels, which may also be associated with tender lumps along the line of the treated veins. This is due to the reaction of the sclerosant on the blood vessel wall and entrapment of "old" blood. When it occurs to a large or prolonged extent it may be treated by draining the blood out of the painful lumps, by a small needle puncture. Other treatments for this may include anti-inflammatory medication, heat packs, massage with a special cream, compression and regular walking.
- **DVT (Deep vein thrombosis):** This is a clot in a deep vein. Risk estimated at 1:1000. This is actually quite rare following sclerotherapy especially if compression and regular daily walking are adhered to. In at risk patients (past personal or family history of DVT, is important to stop the oral contraceptive pill prior to Sclerotherapy as it increases the risk of DVT.
- **Intra-arterial injection:** This is an extremely uncommon complication, which may result in muscle and skin damage.

WILL TREATED VEINS RECUR?

The veins treated adequately by sclerotherapy will not recur. However, the underlying weakness in your vein walls is not corrected by sclerotherapy and therefore new vessels may appear with time. It is important to maintain normal body weight, exercise regularly, avoid constipation and minimise the wearing of high-heeled shoes to minimise the development of dilated veins. Ideally support stockings should be worn every day. These are not as "heavy" as the stockings used after treatments but offer more support than normal stockings. A yearly "check-up" is recommended to detect the development of new veins, which can then be treated easily.

WHAT ARE OTHER TREATMENT OPTIONS APART FROM SCLEROTHERAPY?

- 1) External beam Lasers: External beam lasers can be helpful in the treatment of spider leg veins and excellent for treating abnormal blood vessels on the face.

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- 2) Internal laser fibre: Destruction of the greater (long Saphenous Vein) has been successful using this technique. Presently the main limitation is the high cost along with treatment limitation if the vein is tortuous.
- 3) Surgery: Surgically tying veins off (ligation) or pulling them out (stripping) are other procedures for treating larger leg veins that sometimes cannot be effectively treated by sclerotherapy.

COMMONLY ASKED QUESTIONS

Don't I need these veins?

No. An incompetent vein does not contribute to effective venous return, and ablating or removing it actually improves venous return.

What about possible future bypass surgery?

A vein with weak, fibrosed and dilated walls is of no use as a bypass graft.

Does it hurt?

While a minority of patients find the procedure a little uncomfortable, most patients are actually surprised by the lack of significant pain.

Do they numb my leg or knock me out?

No, neither.

Will they come back?

Other than true treatment failure-no, but most patients require repeat treatments over ensuing years for new varicosities.

What can I do to prevent new veins after my treatment?

Very little in fact. However below are a few considerations that may help.

- Walking (at least 30 minutes three times a week) can slow progression
- Graduated class 1 support hosiery can slow progression
- Standing still for prolonged periods can accelerate progression
- Oestrogens and pregnancy can accelerate progression
- Early treatment should be sought for new varicosities.

What will it cost?

This is quite variable but generally from \$600 to \$1200. Medicare provides a small rebate for up to six treatments in a 12-month period for multiple varicosities over 2.5 mm in diameter.

Should I wait until I've had all my children?

Definitely not. Pregnancy may bring about new veins more quickly, but it will also make the ones already there much worse, both during and after the pregnancy.

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SPECIAL CONSIDERATIONS

All patients require an initial medical consultation. A clinical assessment is made and photographs are taken of the leg veins for future reference.

Patients with clinically evident larger vein(s) incompetence are generally advised to proceed with Duplex Ultrasound examination to properly assess the source of major vein reflux. This is a painless procedure. Should this demonstrate major vein(s) reflux, an appointment for Duplex Ultrasound guided sclerotherapy to the problematic veins is advised. This is a well-tolerated procedure that is an excellent alternative to major varicose vein surgery. Occasionally more than one session is necessary to properly sclerose the treated vein. After a few weeks the need for follow-up conventional sclerotherapy will become clear and this will be undertaken if necessary. We will give you an estimation of the expected total costs for treatments.

In addition to the initial Duplex examination assessment, the costings for one treatment cycle of Duplex guided plus standard sclerotherapy if necessary usually ranges from \$600.00-\$1200.00 depending on the amount of work that needs to be done.

Success rates for this procedure compare favourably with the published results for surgery. Potential complications are the same those listed on Page 2-3 of this document. An additional but rare potential complication is that of injection into an artery instead of a vein which has the potential to cause serious tissue damage. This risk is minimised by techniques that avoid injection at the sites of known anatomical "intersections" of veins and arteries.

In accordance with both current Australian and International trends, we have been using agitated or "foamed" sclerosant solutions for a considerable time now. Most Australian expert sclerotherapists use and endorse foamed solutions in their work due to improved results and the benefit of safer use of larger amounts of sclerosant solutions in the foamed state.

Please remember to bring your class 2 compression stockings on the day of your procedure. Wearing moisturisers and tanning/artificial tanning of the legs can make sclerotherapy impossible to perform.

Finally it must be remembered that all forms of varicose vein treatments are palliative but not curative, as the disease process of varicose vein development remains. Despite the best efforts of your practitioner you may have residual and newly developed veins that require treatment some time in the future according to your personal needs.