



Varicose Vein Injections

(Sclerotherapy)

These are general guidelines for your information and need not apply to specific cases.

About the treatment:

Injection therapy (“sclerotherapy”) has been available around the world for many years, but originally was thought to be suitable only for quite small varicose veins, or unsightly skin veins such as “spider veins”.

With the introduction of *foam sclerotherapy*, it has been possible to treat larger symptomatic veins with a modification of the old injection techniques. A small amount of an irritant chemical (sclerosant) is mixed with air to make a foam. Although the chemical itself is approved to treat varicose veins, the licensing information in Australia does not mention its use as a foam. It has, however, been safely used hundreds of thousands of times throughout Australia and the world very safely.

Under ultrasound guidance the foam is injected into the veins to be treated. The foam increases the amount of volume that can be safely injected to treat the veins, by increasing the volume of foam but still using the same amount of chemical.

The chemical injected is actually a detergent called either sodium tetradecyl sulphate or polidocanol. The active agent is deactivated quickly in the blood, but works by causing inflammation in the wall of the treated vein, which then sticks to itself when external compression (e.g. a stocking) is applied. Scar tissue then forms inside the vein and the vein is obliterated permanently.

If you are having sclerotherapy for spider veins, you will not have the solution foamed, but just an injection of the sclerosant liquid at a lower concentration, to block the veins but trying to avoid irritation or pigmentation.

Before your procedure:

Please ensure you bring your compression stocking(s) (if you have already been provided with them), as you cannot have the injections without putting the stocking on immediately.



The procedure:

Foam sclerotherapy:

Under ultrasound monitoring, the foam preparation is injected into various sites, straight into the varicose vein itself. The foam then spreads out along the vein, with the sclerosant solution coming into contact with all of the incompetent (backwards-flowing) vein wall. The number of injections varies from patient to patient, but most people require 5-10 injections per leg. Sometimes only one leg is treated at the first visit, and repeat injections will be required if both legs are affected or if you have many veins on one leg. Your leg is then placed in a full-length stocking.

Spider veins:

A syringe with a very tiny needle is used to prick the spider veins or the “reticular” veins feeding them, and the liquid sclerosant is injected. Some injections hurt more than others, but usually when the injection gets into the vein itself there is only a mild sting. If there is a lot of pain, please let Dr Ward-Harvey know immediately. It is difficult to predict just how many injections will be needed until we start.

Afterwards:

Immediately after the procedure, you will be asked to take a 30 minute walk. This is essential to keep the blood moving in the deep veins and prevents deep vein thrombosis (DVT).

For the first week after the injection, please take at least two 20 minute walks each day. When sitting, elevate the legs with the knees slightly flexed. Try to avoid standing still for any length of time. Please continue to have a normal active lifestyle. The worst thing you can do is become inactive after the sclerotherapy, as this will increase your likelihood of developing clot problems.

As the injection causes inflammation, it may be necessary to take anti-inflammatory medication (such as Ibuprofen) if you notice painful lumps where the veins were.

After the first night you can remove the stocking and have a shower. After this the stocking should be worn during the day for a further 1-2 weeks (i.e. feel free to remove it for bed and showering). If you are having trouble with getting your stocking on, try using rubber washing-up gloves. If your stocking is hurting you, please let us know. If necessary, you can shower with the stocking on, and use a hair dryer to dry it out.

If you feel like wearing the stocking longer than two weeks, you can wear it as long as you would like.

It is normal for some of the larger veins under the skin to become firm and lumpy after the treatment. This means that the sclerotherapy has been successful in blocking the veins. Over the first few weeks following the injection, any slight discomfort, hardness or



tenderness at the injection site(s) should gradually subside. The lumpiness may take months to resolve. Gentle massage of the lumpy areas can speed up the healing process. If any area is especially tender, on your return visit Dr Ward-Harvey may feel that it is appropriate to make a small incision over the vein to let some of the blood clot out, which will relieve the discomfort.

If you develop a tender swollen calf, please let us or your GP know straight away, so that you can get an ultrasound scan to rule out Deep Vein Thrombosis (DVT).

If you have any concerns that your recovery is not proceeding as expected, please call the rooms and we can discuss what to do.

Complications:

-Most patients cope very well with the injections and suffer few (if any) ill effects. Dr Ward-Harvey will discuss with you any specific details about your particular veins or risk factors which make you any more or less likely to have problems. The following complications are detailed for transparency so that you are aware that sclerotherapy is not immune from ill-effects, no matter who performs the procedure.

-Pain: The needle used for the injections is only small, but will still sting a little. Just after the injections, you will notice some further stinging in the regions treated, which then should settle once the stockings are applied. As the vein becomes inflamed and blocks off over the coming days to weeks, there may be a sting or ache in the affected vein. This may also be associated with a firm ropy cord along the course of the vein, which is the inflamed vein itself. This means the treatment has worked, but this cord usually takes more than a month to disappear. If there is excess pain from "blood trapping", i.e. clot in the blocked vein, then Dr Ward-Harvey can aspirate that blood with an incision or a needle, which should relieve most of the pain straight away. Painful lumpiness can be improved by rubbing Bruise-Eze ointment into the affected area twice a day.

-Bruising: Sometimes the inflammation of the vein causes a small amount of blood to escape into the surrounding tissues, causing bruising. This resolves after a few weeks.

-Pigmentation: Some brown staining of the skin occurs in more than a third of patients with foam sclerotherapy for varicose veins. It does occur, but at a lower rate, in the treatment of spider veins as well. This occurs in the skin overlying the vein, as a reaction to the inflammation from the sclerotherapy. It is more common in patients with moderately pigmented skin. This usually resolves within 12 months, but in up to 5% of patients, this can be permanent.

-Incomplete Treatment: It may not be possible to treat all the affected veins in one visit, and more episodes of treatment may be required. In a handful of patients, complete obliteration of all the veins is not possible. Dr Ward-Harvey will discuss other options for treatment in this case. Sometimes, despite an ultrasound demonstrating that the veins have been successfully blocked, over time some of the veins may reopen. If you are concerned about



recurrence in the future, please let us know and we can do another scan to see what is happening.

-Ulceration: Very rarely some of the sclerosant solution can escape into the skin and cause a toxic reaction, leading to a wound.

-Venous matting: The alteration of the superficial venous circulation can sometimes lead to unforeseen tiny skin veins becoming more visible in the regions treated.

-Allergic Reactions: You may (very rarely) be allergic to the sclerosant compound and have an allergic reaction.

-Extremely rare but serious other complications have been described. These include brief visual disturbances, headache, Deep Vein Thrombosis, or even a stroke (less than 10 ever described in the worldwide literature).

Airline Travel:

Although the risk of blood clots is minimal with injection treatments, we do not advise patients to undertake long distance air travel within four weeks of treatment. Short flights may be acceptable, but if you have any doubts please discuss them with Dr Ward-Harvey.