FOAM SCLEROTHERAPY OF VARICOSE VEINS

INFORMATION FOR PATIENTS

What is sclerotherapy?

The procedure called sclerotherapy or injection of varicose veins is designed to improve the appearance 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. Over a period of time your own body will destroy the vein and it will disappear. The solution used is available in different concentrations depending on the size of the vein being treated and is called Sodium Tretradecyl Sulphate or "STD" for short.

What is foam sclerotherapy?

Usually a solution of STD is injected directly into the vein to be treated. Foam sclerotherapy involves rapidly mixing volumes of the solution with a small volume of air producing a foam. Because of this method the foam can treat some of the larger underlying abnormal veins which would not normally be treated using conventional sclerotherapy. The procedure is performed under ultrasound control. The foam solution causes intense spasm of the vein and a greater volume can be injected without using too much of the STD solution.

Is foam better than conventional sclerotherapy?

The initial results with foam sclerotherapy are very promising and this method of treatment offers a possible alternative to surgery without the anaesthetic risk. However, it should be emphasised that this is a new treatment and at present the long term results are not yet known and it is not possible to say how this treatment compares in terms of results with conventional surgery or sclerotherapy.

Which veins are suitable for foam injection?

Most varicose veins are suitable for this form of treatment. Foam sclerotherapy is of particular advantage to those who have had previous varicose vein operations as it avoids going through the scar tissue of previous surgery. Very extensive and large varicose veins 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?

Using ultrasound scanning, the main surface vein to be treated will be marked on your leg. The surgeon will then inject into a small area of skin, usually the mid calf or lower thigh and a needle will be placed into the vein. The needle will then be flushed with a blood thinning agent containing heparin. Then 2 or 3 smaller needles will be inserted into the visible varicose vein in the leg and the flushing procedure repeated. Your leg will be raised and the foam solution will be injected in small volumes at a time into each of the needles. During this procedure you will be asked to bend your ankle up and down in order to increase the blood flow in your deep veins. As the foam is injected you may experience some slight stinging, but it is usually painless. The passage of the foam in the vein is monitored by the ultrasound scan 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, pieces of sponge will be applied to your leg followed by a bandage in order to compress the treated veins. An elastic compression stocking will then be put on your leg, including the thigh with a waist attachment. This will feel tight but should not be so tight as to make your foot painful or discoloured.

Following treatment

You should keep the sponge, bandage and stocking on continuously for 5 days. After this you may remove the sponges and bandage and then replace the stocking which should be worn for a further 7 days. During this 7 day period you may remove the stocking to shower and you may remove it at night if you wish. If you find the stocking comfortable and wish to wear it for longer this may be helpful. Please bring your stocking back with you to your next visit as it may be possible to reuse it if you have further injections. You should do plenty of walking and may generally do most activities without any problem.

Benefits

The benefit of having the procedure done like this is to avoid the known risks associated with having the surgery under a general anaesthetic

Possible Risks

Superficial thrombophlebitis

Some people may experience 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

Following superficial thrombophlebitis brown pigmentation of the skin can occur and be permanent. However, it will usually fade after a period of several months and may even disappear completely. Keeping out of the sun and using a strong sun factor will also help.

Deep venous thrombosis (Clot)

In order to prevent this, 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. Should the solution pass into the deep veins there is a risk of thrombosis this may be minor with no symptoms or could cause a major blood clot with a risk of pulmonary embolus (passage of a blood clot to the lungs). Surgery also carries a risk of deep venous thrombosis.

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 to the solution

This is rare, but can occur. If you have any allergies you should inform your doctor.

Visual disturbance

There have been reports of temporary visual disturbance with the foam injections. This is thought to be due to the air bubbles rather than the solution injected.

Stroke

Out of the thousands that have had foam sclerotherapy there have only been 2 reported instances of a stroke occurring. There may have been a particular reason why this occurred, including a high volume of foam injected.

Recurrent and residual varicose veins

It is not always possible to eradicate all very small varicose veins. Depending on the number of varicose veins you may need 2, 3 or more further treatments. It is possible the vein could re-open. At the moment, the risk of this is not known and only long term follow-up data will provide this information. Should this happen, it would be possible to treat the vein again, with either a further injection or by surgery.

Alternatives

These are:

- i) Continue as you are.
- ii) Wear compression stockings continuously
- iii) Have the conventional injection therapy.
- iv) Undergo conventional open surgery
- v) Have one of the newer techniques like VNUS Closure Fast or Radiofrequency Ablation (see information on this treatment on this site)

General information

As soon as you have had your surgery you should walk about, gradually increasing to your normal activity and may generally do most activities without any problems. If in doubt ask your doctor. When seated, sit with legs elevated and avoid prolonged standing. Any discomfort you may have will be relieved by taking simple painkillers.

Work

You may return to work as soon as you feel comfortable.

Outpatient Follow Up

You will receive an appointment through the post for about 6 weeks. Please bring your post-procedure questionnaire with you.