Information for patients who require Foam Sclerotherapy for Varicose Veins.

**Why do I need this procedure?**

Everybody has two sets of veins in the legs. These include the superficial and deep veins. Their job is to carry blood towards the heart. The superficial veins run under the skin. There are a number of valves in the veins and these prevent the blood from flowing back. However, if the valves stop working correctly then the blood will flow back into the veins causing them to become large and irregular. These are called varicose veins. The most common symptom is aching or discomfort in the legs after standing for a long time. After the veins have been present for some time the skin over the veins becomes itchy and may even become discoloured. Some may even develop skin inflammation and ulceration.

**Foam Sclerotherapy**

Foam sclerotherapy is slightly different from liquid sclerotherapy as the liquid is mixed with air to create foam. This involves injecting a chemical into the affected vein which causes a localized inflammation thus causing it to block. Blood is pushed out of the varicose vein by the foam solution, making the walls of the vein sticky, closing the vein off and eventually destroying the vein completely. Over a period of weeks and months the treated varicose vein will shrivel up and disappear.

**Are there any alternatives to this procedure?**

The other alternative we can offer is surgery to tie the veins in the groin and then strip and remove them. This has to be done under a general anaesthetic but the risks of bleeding, bruising and nerve injury are slightly more with this technique.

Alternatively you can wear elastic compression hosiery (stockings) which will help to relieve the swelling in your leg. Your leg will need to be measured to make sure you have the correct size stocking fitted, and the stockings will have to be worn every day. It is important that you
apply cream to your legs regularly to prevent dryness. You should exercise regularly to encourage blood to flow back up your leg

**How do I prepare for the procedure?**
Your surgeon will talk to you about what the procedure consists of, and the risks and benefits of having the procedure. The surgeon may also request a Duplex scan of your leg, especially if you have had varicose vein surgery in the past. A Duplex scan is similar to an ultrasound scan in which jelly is placed on your leg and a detailed picture is charted to show the veins and valves in your leg.

There are potential side-effects to foam sclerotherapy you should be aware of:

- **Bruising** – there is usually none or very little, but if there is it disappears in a few weeks.
- **Pigmentation**: About 20-30% of patients, especially those with fair skin and with large varicose veins near to the skin surface can develop streaks of brown pigmentation over where the varicose vein used to be. This usually fades over a few months and in most patients is gone by 6-12 months; however, it can be permanent in rare cases.
- **Lumpiness**: It is normal, especially in patients with large varicose veins, to be able to still feel some lumpiness beneath the skin. Depending on the size of the varicose veins this disappears over a few months and in most patients is gone by 6-12 months; however, some lumpiness can be permanent.
- **Thrombophlebitis**: In patients with large and especially lumpy varicose veins, a painful red lump over the site of one or more of these veins may develop following treatment. This is called ‘superficial thrombophlebitis’ and can be treated with anti-inflammatory medication (e.g. ibuprofen gel and/or tablets) of, if especially problematic, by inserting a small plastic tube into the lump under local anaesthetic and removing small amount of blood clot (usually less than 5mls) causing the problem.

**What are the benefits of this procedure?**
The procedure is done under a local anaesthetic as a day case. An ultrasound scan is carried out and the foam injected into the vein under a local anaesthetic. Several veins are injected at the same time and a compression bandage is applied following this.
How well does it work?
The success of the veins blocking off is about 80%. The average rate of varicose vein recurrence and development of new veins is between 1-15% at follow up intervals ranging from 6 weeks to 6 years.

Risks and complications
Darkening of the skin is noted in about 30% of patients (1 in 30).
Other complications include allergic reaction, bruising and extravasation (leaking) of the sclerosant into the surrounding body tissues. All these occur at a rate of about 4% (4 in 100) in one year.
The rate of nerve damage is less than 1%.
Deep vein thrombosis: As with surgery, foam sclerotherapy is associated with a small risk of DVT. The risk of DVT is about 0.2% (1 in 500). Although DVT is very unlikely, if your leg swells and/or becomes painful after treatment you should contact your GP or visit Accident and Emergency immediately for advice. If a DVT has formed you will probably require treatment with heparin (injections daily for 3-4 days) and then warfarin (tablet daily for 3-6 months).
Pulmonary embolus (PE): As with surgery, if a DVT were to develop after foam sclerotherapy, there is potential risk that a piece of the clot could break off and travel to the lung causing a PE, which could be serious even potentially fatal.
Rates of visual disturbance have been reported between 1-6% (between 1 and 6 patients in every 100). The cause for this is unknown. No visual disturbance lasts for longer than 2 hours and no long term visual disturbance has been noted. Other extremely rare complications include chest tightness, stroke, coughing and fainting.

What happens after the procedure?
You will have your leg bandaged and a thigh length compression stocking applied. The bandage can usually be removed after 7 days but the stocking should be worn continuously for another 3 weeks (i.e. a month in total). You will be allowed home on the same day as your procedure. You will need another scan of your leg, six to eight weeks after the procedure and you may also need some top up injections.
If you are concerned about any this after your procedure when you get home, please feel free to contact any of the advice numbers below.
How soon will I be back to normal?
You should be guided by how you feel. Your leg may feel sore for a day or two following your procedure. It is important that you remain mobile after your procedure. You should walk as much as you can.

Please go for a brisk 15 minute walk immediately after your treatment
Thereafter, please walk about for at least 5-10 minutes each and every hour (that you are awake) for the first 24 hours (5-10 minutes is a minimum, there is no upper limit to the amount of walking you can do). When not walking try to be sitting with your leg up.
Try to avoid prolonged standing, kneeling, squatting, bending and avoid vigorous exercise (e.g. jogging, gym work-out, racquet sports etc.) for 4-6 weeks after treatment
Try to avoid flying (especially long haul) for 4-6 weeks afterwards
Washing – try to avoid getting the treated areas wet whilst bandaged after treatment. After the bandage and the stocking have been removed at 7 days and you have refitted your spare stocking you can then shower/bath (with the stocking on) and refit the first (washed) dry stocking afterwards. Try to avoid very hot water as it will increase the blood flow to your skin and may increase bruising and reduce the effectiveness of the treatment

Most patients feel able to return to work in 2 weeks although this will depend on how you feel. You may be able to drive after a week following this procedure.

Where can I get more information?
If you have any problems do contact your GP who will contact the vascular surgeon on call if required.
1. The vascular nurses Sister Kendall and Sister Dufour can be contacted on 0191 4452828 (answer machine) between 9am -5pm, Monday to Friday. Leave a message and they will get back to you.
2. NHS direct on 0845 46 47

Reference: Information about NICE interventional procedure guidance 217
www.nice.co.uk
Data Protection

Any personal information is kept confidential. There may be occasions where your information needs to be shared with other care professionals to ensure you receive the best care possible.

In order to assist us improve the services available your information may be used for clinical audit, research, teaching and anonymised for National NHS Reviews. Further information is available in the leaflet Disclosure of Confidential Information IL137, via Gateshead Health NHS Foundation Trust website or the PALS Service.

This leaflet can be made available in other languages and formats upon request.