Ultrasound-guided foam sclerotherapy (UGFS) for varicose veins

This information sheet explains more about having UGFS for your varicose veins, including the benefits, risks and alternatives of the procedure as well as what you can expect when you come to hospital. If you have any questions or concerns, please speak to a doctor or nurse caring for you.

What is UGFS?
Sclerotherapy involves injecting an irritant liquid medicine (called a sclerosant) into veins to shrink and seal them off.

In ultrasound-guided foam sclerotherapy, an ultrasound scanner is used to guide the injection of the foam.

What are the advantages of UGFS over traditional surgery?
Traditional surgery involves making a cut in your groin to remove the feeding vein (stripping). UGFS avoids this groin incision (cut) and much of the bruising in the thigh seen after stripping.

Unlike traditional surgery which is carried out under general anaesthetic (you are asleep for the entire procedure), UGFS is done without the anaesthesia. It means that you recover faster and avoid many of the risks involved with having a general anaesthetic.

How well does UGFS work?
The results of the procedure are generally very good – studies have shown that the vein is sealed up in most people who have UGFS (70 to 97 people out of 100).

However, a second course of treatment may sometimes be needed if the vein is not successfully blocked off. As the procedure has not been performed for as long as surgery and there have been a lot of changes to the exact techniques used, there is limited information on the long-term effectiveness of UGFS.
Risks and possible complications

Common problems after treatment:

- Most patients feel a tightening along their leg after the procedure.
- There may be some pain and bruising along the line of the treated vein.
- About one in 10 patients develop marked inflammation (swelling) causing discomfort and lumpiness around the vein (this is called phlebitis). This usually settles down without treatment but anti-inflammatory painkillers may help. It may also leave some brown staining on your skin when the swelling has reduced. To minimise the chances of phlebitis, it is important that the vein is squeezed empty after the procedure. For this reason, you will need to wear compression bandages and then stockings once you have removed the bandages (you will leave the hospital with compression bandages and we will give you stockings to wear).
- Varicose veins can return after all types of procedures. The underlying weakness in the vein valves may result in other veins causing further varicose veins in the future. Overall, the risk of recurrence after UGFS is five in 100 people.

Rare problems:

- Deep vein thrombosis (DVT) is a rare complication of any operation to the legs. To lower this risk, you will be given advice on the importance of walking normally after UGFS. Walking keeps your blood flowing in the important deep veins, whereas being inactive can increase your risk of DVT. We recommend a minimum of three 20-minute walks each day after the procedure.
- Allergic reactions can occur shortly after injections of sclerosant but are rare.

Giving my consent (permission)

We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves.

If you would like more information about our consent process, please speak to a member of staff caring for you.

What happens during the procedure?

The sclerosant is mixed with air to create foam so that it can be seen with an ultrasound scanner. Using the ultrasound scanner for guidance, the foam is injected into the vein which is causing the varicose veins. A compression bandage is then placed on the leg, sometimes with pads, to squeeze the treated vein flat. The procedure itself usually takes only a few minutes.

Over the following days the body reacts to the damaged vein by causing inflammation (swelling) and absorbing the tissue in the vein. This makes sure that the vein stays closed permanently.

Will losing the vein make the circulation in my leg worse?

No, this will not make the circulation worse. The important veins in your leg that return blood to your heart are the deep veins, which are not damaged by this treatment. The vein that is treated has blood flowing the wrong way (reflux) and so some people’s circulation is improved by treating the refluxing vein.
**What happens after UGFS and when I go home?**

Your leg will be bandaged from the foot up to the top of the treated vein. Most patients usually leave hospital around half an hour after the procedure. You will be able to walk out of the hospital but should not drive home.

The leg is usually a little more uncomfortable the morning after the procedure. You may need to take painkillers for a few days after the procedure, according to the instructions on the packet. If you develop phlebitis, the pain may last up to three or four weeks. Anti-inflammatory painkillers will help until it settles down on its own.

You should leave the bandages on for 48 hours after the procedure. Once you have removed the bandages, you should wear the fitted support stocking for two weeks. You may remove the stocking to have a shower or bath, but continue to wear it at all other times. You do not need to wear it when you go to sleep.

It is a natural reaction to limp when your leg is painful, but your muscles, bones or joints are not affected by the procedure. Please try to walk as normally as possible rather than limping – this will help the circulation in your leg after the procedure.

We advise that you do not drive for at least 24 hours after UGFS. You should only drive again when you are free of pain and able to perform an emergency stop comfortably.

You should be able to return to work 36 hours after the procedure, depending on your recovery and the type of work that you do. If you develop phlebitis (lumpy inflammation along your vein), you may need to stay at home for about 10 days. If you need a sick note, please contact your GP.

Avoid strenuous exercise for a few days and then gradually build up the amount you do.

**How soon can I fly?**

Sitting down for long periods with your knees bent increases the risk of a DVT. You should avoid long haul travel (out of Europe) for at least four weeks after your procedure.

**Will I have a follow-up appointment?**

In most instances, the surgeon will be happy for your follow-up to be done by your GP – you will be advised if this is the case before you leave the department.

If you need to come back to hospital for your follow-up, an initial telephone consultation will be arranged to check the results. You will be sent an appointment for this by post, usually six to eight weeks after your treatment. You will be able to discuss the results of your treatment with one of the vascular doctors or nurses.
Contact us
If you have any questions or concerns about UGFS, please contact the vascular nurse specialist on 020 7188 0056 (Monday to Friday, 9am to 5pm), or Luke Ward on 020 7188 3566 (24 hours).

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

Further information
The National Institute of Clinical Excellence (NICE) has further information on UGFS on its website at www.nice.org.uk/IPG182publicinfo

Pharmacy Medicines Helpline
If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.
**t:** 020 7188 8748 9am to 5pm, Monday to Friday

Patient Advice and Liaison Service (PALS)
To make comments or raise concerns about the Trust’s services, please contact PALS. Ask a member of staff to direct you to the PALS office or:
**e:** 020 7188 8801 at St Thomas’  **t:** 020 7188 8803 at Guy’s  **e:** pals@gstt.nhs.uk

Language Support Services
If you need an interpreter or information about your care in a different language or format, please get in touch using the following contact details.
**t:** 020 7188 8815  **fax:** 020 7188 5953

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Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.
**t:** 111

NHS Choices
Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.
**w:** www.nhs.uk