

## **Understanding NICE guidance**

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**Information for people who use NHS services**

# **Ultrasound-guided foam sclerotherapy for varicose veins**

*NICE 'interventional procedure guidance' advises the NHS on when and how new surgical procedures or procedures that use electromagnetic radiation (such as X-rays, lasers and gamma rays) can be used.*

This leaflet is about when and how **ultrasound-guided foam sclerotherapy** can be used to treat people with varicose veins in the NHS in England, Wales and Scotland. It explains guidance (advice) from NICE (the National Institute for Health and Clinical Excellence).

NICE has produced this guidance because the procedure is quite new. This means that there is not a lot of information yet about how well it works, how safe it is and which patients will benefit most from it.

This leaflet is written to help people who have been offered this procedure to decide whether to agree (consent) to it or not. It does not describe varicose veins or the procedure in detail – a member of your healthcare team should also give you full information and advice about these. The leaflet includes some questions you may want to ask your doctor to help you reach a decision.

*This procedure may not be the only possible treatment for varicose veins. Your healthcare team should talk to you about whether it is suitable for you and about any other treatment options available.*

## What has NICE said?

This procedure can be offered as a treatment option for people with varicose veins provided that doctors are sure that:

- the patient understands what is involved and agrees to the treatment, and
- the results of the procedure are monitored.

A small number of patients may experience brief side effects. There should be special arrangements for monitoring what happens when a person has ultrasound-guided foam sclerotherapy.

The procedure should only be done using medicines licensed for sclerotherapy of varicose veins.

There is little evidence on how well the procedure works in the long term.

Further work will be done to look for research and studies in this area. Then NICE will update its guidance on this procedure.

## Other comments from NICE

The safety of the procedure may be affected by the method used to make the foam and the size of the foam bubbles.

The amount and concentration of the foam varied among the studies and it is unclear whether this made a difference.

One patient had a heart attack shortly after having foam sclerotherapy but it was unclear whether this was related to the treatment.

## Ultrasound-guided foam sclerotherapy

**The procedure is not described in detail here – please talk your specialist for a full description.**

Varicose veins are veins that have become wider than normal, which means they can't transport the blood properly. The long saphenous vein, which runs from the foot up to the thigh, is the vein that is most commonly affected.

Symptoms can include heaviness, aching, throbbing, itching and cramps or fatigue in the legs. Some patients might have skin discolouration, skin inflammation or ulcers on the skin.

People with severe symptoms may be offered sclerotherapy. In standard sclerotherapy a liquid sclerosant (medicine) is injected into the veins to block them.

In foam sclerotherapy, a foam made by mixing a liquid sclerosant with air or another gas is used instead. The foam is injected into the affected vein to fill it. Some patients may need more than one session.

## What does this mean for me?

NICE has said that this procedure works well enough for use in the NHS. If your doctor thinks it is a suitable treatment option for you, he or she should make sure you understand the benefits and risks before asking you to agree to it. A small number of people may experience brief side effects.

### You may want to ask the questions below

- What does the procedure involve?
- What are the benefits I might get?
- How good are my chances of getting those benefits? Could having the procedure make me feel worse?
- Are there alternative procedures?
- What are the risks of the procedure?
- Are the risks minor or serious? How likely are they to happen?
- What care will I need after the operation?
- What happens if something goes wrong?
- What may happen if I don't have the procedure?

## Summary of possible risks and benefits

Some of the benefits and risks seen in the studies considered by NICE are **briefly** described below. NICE looked at nine studies on this procedure.

### How well does the procedure work?

Several studies compared foam with liquid sclerotherapy. In one, blood flow in the saphenous vein had returned to normal after 3 weeks in twice as many patients who'd had sclerotherapy with foam (84%, 38 out of 45) than with liquid (40%, 17 out of 43). At 6 months, the treated veins had become unblocked in 4% of patients in the foam group (2 out of 45) and 14% of patients in the liquid group (6 out of 43).

In one study, the saphenous vein was successfully blocked in 68% of patients treated with foam (25 out of 37) compared with 18% of patients in the liquid group (7 out of 40). After 1 year, the varicose veins returned in 8% of patients in the foam group and 25% in the liquid group.

In another study, blood flow had returned to normal in more limbs that had been treated with foam (67%) than treated with liquid (47%) by 6 months after the procedure.

*You might decide to have this procedure, to have a different procedure, or not to have a procedure at all.*

Two other studies used foam sclerotherapy. In one, treatment remained successful after nearly 2 years in 97% of the veins that had been treated (109 out of 112). In the other, foam treatment was successful in 93% of patients after 20 to 180 days (158 out of 170). The treatment was given in different ways in both of these studies.

The expert advisers were unsure about how well this procedure works. The published evidence did not clearly show a benefit, especially in the long term.

### **Risks and possible problems**

Problems after having foam sclerotherapy included inflammation of veins, blood clots (thrombosis) and changes in the skin's colouring. About 2% of patients had short-term side effects, including chest tightness, dry cough, headache, 'pins and needles' or problems with their vision.

In a report on about 6400 foam sclerotherapy sessions, there were 37 adverse events (less than 1%). These included brief problems with vision (eight cases), while some people with vision problems also had headache, nausea or fainting (eight cases). In all 16 cases the problems disappeared on their own, with no after effects. Six patients fainted, three had thrombosis and one had deep vein thrombosis. One patient had a stroke shortly after having foam sclerotherapy.

The expert advisers said the possible problems were deep vein thrombosis, thrombophlebitis and allergy. The risks with foam sclerotherapy and liquid sclerotherapy were about the same.

### **More information about varicose veins**

NHS Direct online ([www.nhsdirect.nhs.uk](http://www.nhsdirect.nhs.uk)) may be a good starting point for finding out more. Your local Patient Advice and Liaison Service (PALS) may also be able to give you further advice and support.

### **About NICE**

NICE produces guidance (advice) for the NHS about preventing, diagnosing and treating different medical conditions. The guidance is written by independent experts including healthcare professionals and people representing patients and carers. They consider how well an interventional procedure works and how safe it is, and ask the opinions of expert advisers. Staff working in the NHS are expected to follow this guidance.

*To find out more about NICE, its work and how it reaches decisions, see [www.nice.org.uk/about/guidance](http://www.nice.org.uk/about/guidance)*

*This leaflet and the full guidance aimed at healthcare professionals are available at [www.nice.org.uk/IPG182](http://www.nice.org.uk/IPG182)*

*You can order printed copies of this leaflet from the NHS Response Line (phone 0870 1555 455 and quote reference N1069).*