

This leaflet tells you about having sclerotherapy. It explains what is involved and what the possible risks are. It is not meant to replace informed discussion between you and your doctor, but can act as a starting point for such discussions. If you have any questions about the procedure please ask the doctor who has referred you or the department which is going to perform it.

### **What is sclerotherapy?**

Sclerotherapy is a procedure to treat vascular malformations (benign non-cancerous tumours). A liquid agent (sclerosant) is injected through a needle into the swelling to cause it to shrink. Often a course of treatment is required to obtain the desired effect.

### **Why do you need sclerotherapy?**

Your doctors feel that your malformation is not suitable for an operation and is best treated with sclerotherapy. This is aimed at reducing the size and symptoms of the malformation, usually over a course of treatment. Other imaging tests will usually have been performed (such as a magnetic resonance imaging [MRI] scan and an ultrasound scan) to aid the diagnosis and will have helped in deciding the best form of treatment in your case.

### **What is a malformation?**

A vascular malformation is a rare benign tumour that is present at birth. They are low (slow) flow lesions that tend to grow very slowly. At certain times (such as puberty and pregnancy) they may grow more quickly. Most vascular malformations cause no particular problems; however, about half do. The problems caused are commonly pain and swelling, overlying skin

discoloration or a combination. Although we cannot cure these malformations, the aim is to improve the symptoms and aesthetics (look of them). Surgery is sometimes used but even then the malformations tend to grow back in time.

Low flow malformations can be **venous** (blood spaces), **lymphatic** (lymph spaces) or **mixed**.

### **Are there any risks?**

Sclerotherapy is a safe and effective procedure, but as with any medical procedure there are some risks and complications that can arise.

There will be pain and swelling following the procedure. If the malformation does not swell then it is likely that the treatment will not work. The pain should subside over a day or so and the swelling over about 5–10 days. This usually responds to paracetamol or ibuprofen.

If the malformation is close to, or just under the skin, there is a small risk of skin blistering and rarely skin loss. If this were to occur, it usually requires simple bandaging but rarely may require an operation.

Very rarely, nerve damage can occur if the malformation is close to a major nerve. This is usually a temporary situation due to the nerve being 'bruised'. However, although extremely rare, this can be a permanent loss. This will be taken into account by the multidisciplinary team of doctors before deciding whether this type of treatment is suitable for you.

There is a chance the malformation may not shrink or may even grow again later, in which case further treatment may be required. This will be decided when you visit the clinic for a

follow-up appointment in the months following treatment.

If a general anaesthetic is required, this carries an extremely small risk.

### **Who has made the decision?**

The multidisciplinary team responsible for your care will have decided after reviewing the imaging and meeting with you. You will have met some of the team in the clinic who will have discussed the situation and feel this is the next step. However, you will also have the opportunity for your opinion to be considered and if, after discussion with your doctors, you no longer want the procedure, you can decide against it.

### **Are you required to make any special preparations?**

The procedure will most likely be carried out under local anaesthesia as an adult (possibly with a light sedative) and a general anaesthetic as a child. The procedure is generally carried out as a day case.

You may be asked not to eat for four hours before the procedure, although you may still drink clear fluids such as water.

If you have any allergies or have previously had a reaction to the dye (contrast agent), you *must* tell the radiology staff before you have the test.

### **Who will you see?**

A specially trained team led by an interventional radiologist within the radiology department. Interventional radiologists have special expertise in reading the images and using imaging to guide catheters and wires to aid diagnosis and treatment.

### What happens during the sclerotherapy?

You will be asked to get undressed and put on a hospital gown. A small cannula (thin tube) will be placed into a vein in your arm.

You will be asked to lie flat on your back on the X-ray table. You may have monitoring devices attached to your chest and finger and may be given oxygen.

Sclerotherapy is performed under sterile conditions and the interventional radiologist and radiology nurse will wear sterile gowns and gloves to carry out the procedure.

The skin overlying the swelling will be swabbed with antiseptic and you may have a small injection of a sedative to make you feel sleepy. Using ultrasound guidance, several small needles will be placed in the swelling. A small amount of dye (contrast agent) is sometimes injected to confirm the needle is correctly positioned and to calculate the correct volume of sclerosing agent to inject. The liquid or foam sclerosing agent is injected and the procedure is finished. Sometimes it is not possible to place a needle in a safe position and the procedure has to be abandoned.

### Will it hurt?

Following injection of the liquid or foam agent, there will be some pain and swelling due to inflammation. This is the desired effect. It may last up to 10–14 days. Painkillers and anti-inflammatory medication will have been administered to help reduce this but expect some pain and swelling to last up to ten days.

### How long will it take?

Every patient is different, and it is not always easy to predict; however, expect to be in the radiology department for about an hour.

### What happens afterwards?

You will be taken back to your ward. Nursing staff will carry out routine observations including pulse and blood pressure and will also check the treatment site. You will generally go home later that day. You will only stay overnight if the pain and swelling is not adequately controlled.

### Finally

Some of your questions should have been answered by this leaflet, but remember that this is only a starting point for discussion about your treatment with the doctors looking after you. Make sure you are satisfied that you have received enough information about the procedure.

### Contact:

British Society of Interventional Radiology website at: [www.bsir.org](http://www.bsir.org)

This leaflet has been prepared by the British Society of Interventional Radiology (BSIR) and the Clinical Radiology Patients' Liaison Group (CRPLG) of The Royal College of Radiologists. Approved by the Board of the Faculty of Clinical Radiology: 25 February 2011

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British Society of Interventional  
Radiology

## Sclerotherapy for vascular malformations

### Patient information

