

Sclerotherapy for Vascular Malformation – image guided

Information for patients

This leaflet explains sclerotherapy for vascular malformation. It covers what to expect, including the benefits, the potential risks and the alternatives.

Before the procedure, a clinical staff member will explain the procedure to you in detail. This leaflet is not meant to replace that discussion. If you have any questions or concerns, please do not hesitate to speak to the doctor who referred you to the Interventional Radiology Department. It is important that you feel well informed before agreeing to the sclerotherapy for vascular malformation and signing the consent form.

Confirming your identity

Before you have a treatment or procedure, our staff will ask you your name and date of birth and check your ID band. If you do not have an ID band we will also ask you to confirm your address. If we do not ask these questions, then please ask us to check. Ensuring your safety is our primary concern.

What is sclerotherapy?

It is a way of treating abnormal clusters of blood vessels (vascular malformations) that can cause pain, swelling and other symptoms. It is a minimally invasive procedure, which means that we make only a small cut to carry out the treatment and normally done under local anaesthetic which means you will be awake.

We inject a special solution (sclerosant), either directly into the malformation or through the vessel that feeds blood to the malformation. It causes the abnormal vessels to shrink and eventually be absorbed by your body. The type of solution we use will depend on the type of malformation we are treating.

Ultrasound and x-ray machines will be used to guide the needle to ensure the solution injected into the correct place.

Why do I need this procedure?

You have been diagnosed with a vascular malformation that may be causing you symptoms such as pain or swelling. You may also have this procedure for cosmetic reasons. Sclerotherapy is an effective treatment that does not involve surgery. It can help ease your symptoms by making the malformation smaller.

What are the risks?

All medical and surgical procedures can cause complications, even though every effort is made to prevent them.

- **Bleeding at the injection site:** You may have a small bruise after the procedure, but this usually fades within a week or two.
- **Damage to nearby blood vessels:** This is rare and could cause a small blood clot or a tender lump. In rare cases, you may need more treatment.
- **Pain after the procedure:** This can range from mild discomfort to more severe, cramp-like pain. It is usually worst within the first six to eight hours of having the procedure. You can take painkillers to ease it.
- **Skin discoloration or ulceration:** The treated area may become discoloured or, in rare cases, develop a small ulcer. These side effects are usually temporary, but you may need more treatment.
- **Infection:** Rarely, your injection site can become infected. If this happens, we will treat you with antibiotics.
- **Allergic reaction to the sclerosant:** This is rare. If you have a history of allergies, especially to similar substances, please tell your doctor.
- **Non-targeted embolisation:** Rarely, the sclerosant can travel to the wrong vessel. Depending on where the vessel is, this may cause serious complications if vital vessels are affected.
- **Radiation exposure:** We do sclerotherapy using ultrasound (US) and x-ray guidance. US does not expose you to radiation. X-ray guidance involves a dose of radiation that is about the same as an x-ray of your abdomen.

What are the benefits?

Sclerotherapy usually greatly reduces the size of the vascular malformation, so you have less pain and swelling. Because the procedure is minimally invasive and does not involve major surgery, you have a faster recovery time. Most patients have a significant reduction in symptoms and improvement in the appearance of the treated area.

Are there any alternatives?

Alternative treatments may include:

- **Surgical removal:** This is usually considered for removing large or complex malformations but involves more risks and a longer recovery time.
- **Laser therapy:** This can be used for certain types of vascular malformations, especially those closer to the surface of your skin.

Your doctor will discuss the best treatment option for your specific case.

Consent

We must by law obtain your written consent to any operation and some other procedures, including a sclerotherapy for vascular malformation, beforehand. Staff will explain the risks, benefits and alternatives before they ask you to sign the consent form. If you are unsure about any aspect of the procedure or treatment proposed, please do not hesitate to speak with a senior member of staff again. We will inform your GP that you have had this procedure unless you specifically instruct us not to.

Where will I have the procedure?

You will have it in the main Interventional Radiology Department Angiography Laboratory (1st floor, Denmark Wing, King's College Hospital, Denmark Hill).

How can I prepare for my procedure?

Pre-assessment appointment: We will arrange for you to have a pre-assessment appointment and clinic consultation with one of our Interventional Radiologists and Interventional Radiology Nurses, either in person or by phone. They will ask you questions about you, your health and the medications you take. They may also take a blood sample to check that you are in good general health and how well your blood clots. You usually have the blood test in our department at King's College Hospital or at your local GP.

After your pre-assessment, we will arrange a date and time for your procedure. We usually let you know the appointment details the same day as your pre-assessment.

Compression stocking: We might ask you to bring a compression stocking with you, either for your leg or arm (whichever is applicable), so you can wear it after the procedure.

Drugs and alcohol: Do not use any recreational drugs or drink alcohol for 24 hours before the procedure.

Medications: Please make sure the doctor or nurse knows if you are a diabetic who is taking oral diabetic tablets such as metformin or uses insulin injections. Also tell them if you are taking any of the following blood-thinning medications (anticoagulants): aspirin, clopidogrel, warfarin, apixaban, rivaroxaban, edoxaban, ticagrelor, prasugrel, phenprocoumon, acenocoumarol, dagibatran, argatroban, heparins, fondaparinux, enoxaparin.

Usually, you will need to stop taking these medications a few days to a week before the procedure. But do not stop them on your own without talking to your vascular doctor first. They will tell you when to stop and when it is safe to start taking them again.

If in doubt, please bring with you all the medications you are taking, whether they have been prescribed for you or you have bought them over the counter at your local chemist store.

Will I be admitted to hospital for the procedure?

You are not usually admitted to hospital for this procedure. You will have it in the morning and, if everything is okay, we will discharge you home later in the day. Please arrive at Interventional Radiology at 8am so you can be admitted to the unit.

Rarely, you might need to be admitted to the hospital the night before or on the morning of the procedure. We will let you know if either of these apply to you when we inform you of your procedure date.

What happens on the day of the procedure?

Eating and drinking: Have a light breakfast at about 5am but do not eat anything after this time. You can drink clear fluids up to **two hours** before your procedure.

Medications: Keep taking your regular medications, except for any blood-thinning ones. Remember to take your blood pressure medication on the morning of the procedure (if applicable). If your blood pressure is too high on the day of the procedure, you might need to have the procedure on another day.

What to bring with you: Please bring a small overnight bag, all your medications and something to read, as a small number of patients (fewer than 5%) need to stay overnight after the procedure.

What not to bring with you: Do not bring valuables, jewellery or large sums of money with you. If this unavoidable, please ask a relative or friend to take them home for you. The hospital cannot accept liability for the loss of items that are not handed in for safekeeping.

What happens before my procedure?

One of our nurses will ask you to change into a gown. They will check your blood pressure, heart rate and temperature, and ask you some admission questions. They will put a small, thin tube called a cannula into a vein in your hand or arm so we can give you medications such as pain relief if you need them during or after the procedure.

What happens during the procedure?

An Interventional Radiologist – a specialist doctor trained in image-guided procedures – will carry out your sclerotherapy. They will explain the procedure to you, ask for your consent and then do your procedure.

They will ask you to lie flat on an x-ray table. They will clean the area where they plan to inject the sclerosant and give you a local anaesthetic to numb the area. They may use an ultrasound machine to ensure they get the correct area. You might feel a brief sting before the area gets numb.

The doctor will then carefully insert the needle and inject the sclerosant into the vascular malformation, using real-time x-ray images to guide them.

Will the procedure hurt?

The procedure should generally be painless, apart from the brief sting you feel when you have the local anaesthetic injection.

You may feel mild discomfort while the sclerosant is being injected, but we will offer you pain relief if you need it.

How long does the procedure take?

It usually takes between 30 minutes and an hour, but you should plan to be in the Interventional Radiology Department Recovery Unit for about two to four hours. Sometimes you may need to stay here longer.

What happens after the procedure?

You will be asked to rest for a few hours. The radiologist and nurses will tell you for exactly how long. They will monitor you while you are recovering, to make sure there are no complications.

They may ask you to wear a compression stocking on one of your legs or arms (whichever is applicable) for a certain period of time.

Once they are sure you are okay, you will be able to go home.

When can I go home?

If there are no complications, most patients can go home the same day.

How do I care for the puncture (needle-entry) injection site?

You will have a small dressing over the site. Keep the area clean and dry for at least 48 hours.

When can I exercise and go back to work?

For the next one to two weeks, avoid heavy lifting, contact sports and strenuous exercise, and follow any additional care instructions your doctor gives you. When you can go back to work depends on the area treated and you may need to take a few days off. Your doctor or nurse will advise you, either at your pre-assessment or after the procedure.

Will I have a follow-up appointment?

You will have a follow-up appointment to check how well the treatment has worked and to discuss if you need any more care about four weeks after the procedure.

What should I do if I cannot come for my procedure?

Please let us know as soon as possible by contacting the Interventional Radiology Department, so we can arrange another date and time. This also enables us to offer your appointment time to someone else.

King's College Hospital, Denmark Hill, Tel: **020 3299 3490, 020 3299 6730** or **020 3299 3280**

Who can I contact with queries or concerns?

If you have any questions about your procedure, please contact the Interventional Radiology Nurses:

- King's College Hospital, Denmark Hill, tel: **020 3299 3490** or **020 3299 2060**
Monday to Friday, 9am – 5pm

More information and support

- King's College Hospital: www.kch.nhs.uk
- NHS: www.nhs.uk, tel: 111
- British Society of Interventional Radiology: www.bsir.org (click on Patients, click on patient information leaflets, select leaflet)

Care provided by students

We provide clinical training where our students get practical experience by treating patients. Please tell your doctor or nurse if you do not want students to be involved in your care. Your treatment will not be affected by your decision.

PALS

The Patient Advice and Liaison Service (PALS) offers support, information and assistance to patients, relatives and visitors. They can also provide help and advice if you have a concern or complaint that staff have not been able to resolve for you.

PALS at King's College Hospital, Denmark Hill, London SE5 9RS:

Tel: **020 3299 3601** Email: **kch-tr.palsdh@nhs.net**

You can also contact us by using our online form at **www.kch.nhs.uk/contact/pals**

If you would like the information in this leaflet in a different language or format, please contact PALS on 020 3299 1844.