



# Lymphatic sclerotherapy: information for families

This information sheet explains about lymphatic sclerotherapy, why it might be suggested and what to expect when your child comes to Great Ormond Street Hospital (GOSH) for treatment. An Easy Read information sheet is also included for your child. Sclerotherapy is also used to treat malformations around the eye (orbital sclerotherapy) and other types of malformation (venous malformations) elsewhere. Information about these procedures is also available.

Lymphatic sclerotherapy is a procedure used to treat lymphatic malformations. Lymphatic malformations (sometimes referred to as cystic hygromas) are a collection of small cysts. These are congenital, that is, they were present when your child was born. The cysts are filled with a clear fluid similar to the fluid in a blister. A medicine is injected into the cysts, which irritates them encouraging them to scar and shrink.

The cysts have no purpose and can cause problems. The walls of the cysts are quite thin and contain little blood vessels. Occasionally the blood vessels break and cause a clot to form inside the cyst. This can lead to sudden swelling and bruising of the area. This can be painful and the appearance of the bruising can be upsetting. The cysts can also become infected. Sclerotherapy is a way of trying to reduce the size of the cysts so that they are smaller and less troublesome.

Sclerotherapy is carried out in the Department of Radiology by a doctor (radiologist) who specialises in using imaging to carry out procedures. This information sheet only explains about lymphatic sclerotherapy. For information about other sclerotherapy procedures, see our information sheets available from our department, the Pals Office or our website.



*Before sclerotherapy*



*After sclerotherapy*

## What happens before the sclerotherapy?

You will already have received information about how to prepare your child for the procedure in your admission letter. You may need to come to GOSH before the sclerotherapy so that your child can have a pre-admission assessment to check that they are well enough. This appointment is usually arranged for the day of the procedure and

may involve taking blood samples, photographs and other tests.

The person bringing your child to the test should have 'Parental Responsibility' for them. Parental Responsibility refers to the individual who has legal rights, responsibilities, duties, power and authority to make decisions for a child. If the person bringing your child does not have Parental Responsibility, we may have to cancel the test.

On the day of the procedure, you will meet the radiologist. They will explain the procedure in more detail, discuss any questions you may have and ask you to sign a consent form giving permission for your child to have the sclerotherapy. If your child has any medical problems, please tell the doctors.

An anaesthetist will visit to talk to you about your child's anaesthetic.

## **What does the sclerotherapy involve?**

Lymphatic sclerotherapy is almost always carried out while your child is under a general anaesthetic. It is important that your child does not eat or drink anything for a few hours before the anaesthetic. This is called 'fasting' or 'nil by mouth'. Fasting reduces the risk of stomach contents entering the lungs during and after the procedure.

You will be informed the night before the procedure of the time that your child should be 'nil by mouth' – in other words, have nothing to eat or drink before the anaesthetic. Fasting times are provided in your admissions letter.

It is equally important to keep giving your child food and drink until those times to ensure they remain well-hydrated and get adequate nutrition. This may involve waking your child in the night to give them a drink which we recommend.

Once your child is under general anaesthetic, the radiologist will check the lymphatic malformation using an ultrasound scan. Using the ultrasound scan as a guide, they will insert a small needle through the skin into the abnormal cysts. If possible, the radiologist will use the needle to drain off some of the fluid inside the cysts. They will inject a very small amount of medicine through the needle, which irritates and inflames the malformation, which causes swelling but this goes down over the next few weeks. Finally, the radiologist removes the needle. No stitches or dressings are needed – you will only be able to see a few pinpricks in the skin.

## **Are there any risks?**

Your child will be having sclerotherapy under general anaesthetic. Every anaesthetic carries a risk but this is extremely small. Sclerotherapy causes irritation and swelling, so the area treated will look a little worse than usual after the procedure. This is usually a good sign as it shows the medicine is working. The area may feel bruised and sore for a few days, but your child will have pain relief.

There is a slightly higher risk of the malformation developing an infection after the procedure. Your child will need a short course of antibiotics if this happens. As the medicine injected irritates the cysts, they are generally more prone to complications in the first week or two after the procedure. There is a slightly higher risk than usual of the cysts developing blood clots inside them. This causes sudden swelling and bruising, which may be uncomfortable.

Sclerotherapy works for most children but not all of them. Experience helps us understand which malformations are more likely to respond. If the doctors feel that the first sclerotherapy treatment has not been very successful, they might suggest surgery, perhaps in combination with further sclerotherapy.

## Are there any alternatives to lymphatic sclerotherapy?

Sclerotherapy seems to be the best treatment option of lymphatic malformations as it carries lower risks than open surgery. It does not cause any visible scarring and the malformation does not appear to grow back after treatment. However, as every child with a lymphatic malformation is different, sclerotherapy may not be the best option. Sometimes a combination of sclerotherapy and surgery might be suggested. Your doctor will explain the options for treatment suitable for your child.

## What happens afterwards?

Your child will return to the ward after they have recovered from the anaesthetic. Some children feel sick and vomit after a general anaesthetic. Your child may have a headache or sore throat or feel dizzy, but these side effects are usually short-lived and not severe. Your child can start eating and drinking as normal once they feel like it.

The lymphatic malformation will almost certainly look worse after the procedure as the bruising and swelling last for a few days. It can be helpful to show your child some 'before and after' photographs, such as in this information sheet, so that they are prepared. The treated area will feel uncomfortable afterwards but children's pain relief medicine is usually enough to deal with any pain.

## Going home

You will be able to go home once the doctors are happy that your child is recovering well.

The medicine injected into the lymphatic malformation may make the area swell over the first week or two. The area may also be red, bruised and feel slightly tender. These effects are normal and show that the medicine is having an effect. Most children only need a dose or two of children's pain medicine, such as paracetamol or

ibuprofen. Any swelling should start to go down within a week but the effects of the treatment, such as a decrease in pain or size, may not be obvious for a couple of months.

Lymphatic malformations are also prone to blood clots forming inside the cysts. Your child's lymphatic malformation may have shown signs of this in the past, such as sudden swelling and bruising. Treating the lymphatic malformation may provoke another bleed in the week following treatment. If this occurs, give your child a dose or two of children's pain medicine. The bleed or clot usually settles without treatment, in which case it will not affect how well the sclerotherapy works.

If the clot stays big and hard for more than two weeks, your child may need the procedure to be repeated. Please call the IR department to tell us about this (details below).

Treating the lymphatic malformation may provoke an infection following treatment. An infection makes the area more swollen, hot and painful than expected rather like an abscess. Your child will have a high temperature and feel generally unwell. If this occurs, your child may need a short course of oral antibiotics from your family doctor (GP).

You should call the hospital if:

- Your child is in a lot of pain and pain relief does not seem to help
- The treated area is unusually hot, red and painful and your child is general unwell with a high temperature or not eating or drinking as usual

If you have any questions, please telephone the ward from which your child was discharged or one of the numbers below.

## What happens next?

The doctors will tell you if your child needs further sclerotherapy procedures and if so, when. Your

child might need to have a routine outpatient appointment a few weeks afterward before this decision is made. We will send you a letter with the planned date of the outpatient appointment or next treatment session.

Your child might need several sclerotherapy procedures to reduce the malformation. As sclerotherapy causes swelling and discomfort, it is

safer to carry out several smaller treatments limiting the effects each time. Sclerotherapy will not 'cure' the malformation but it should shrink it significantly.

Occasionally children need to have further sclerotherapy as they get older and some may need surgery to tidy up any loose skin.

## Useful numbers

- Interventional Radiology department: 020 7829 7943
- Birthmark Unit: 020 7405 9200 extension 1113
- Out of hours, call 020 7405 9200 and ask for the On-call Doctor for Dermatology

## Having sclerotherapy



You have a network of tubes throughout your body. Some are blood vessels that carry blood and some carry another fluid called lymph (said: lim-f) fluid.



Sometimes these vessels can twist and tangle, which causes problems. Blood or lymph might collect in the tangle, causing swelling. The blood could clot, which can be painful.



Sclerotherapy (said scl-air-o-their-ap-ee) uses a medicine injected into the tangle. This annoys the vessels and makes them shrink.



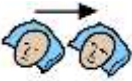
You will have an anaesthetic (said an-ess-thet-ick) for the sclerotherapy. You will not be able to feel anything or know what is happening.



The doctor will use an ultrasound (said: ull-tra-sow-nd) scan to see inside the tangle. Next they will inject some liquid that shows up a different colour on the scan. This gives a picture of the inside of the tangle.



The doctor will inject the medicine in several places in the tangle of vessels. The medicine annoys the tangle of vessels. To begin with, it will make it swell but it will get smaller over the next few weeks.



At the end of the procedure, you will start to wake up from the anaesthetic.



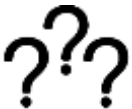
If your arm or leg was injected, the doctor may cover the area with a stretchy bandage.



The nurses will check you regularly to make sure you are getting better. You can then go home.



You might feel a bit sore after the injections. You can take pain medicines if you want.



Please ask us if you have any questions.