Awake (but with the area numbed with a local anesthetic)

- **There is no fasting:** You (or your child) can eat normally on the day of the procedure.
- **No waiting around at the start:** You and your family member can come to the imaging department at the time of your appointment. This means that there is no waiting around and if you live far away we can arrange an appointment that gives you time to travel here.
- **Less waiting around at the end:** After the procedure we ask you to stay in the radiology department for 30 minutes after your first treatment then you can leave and carry on with your day. There is no drowsiness because you haven't had a general anesthetic. After the next treatment(s) we wouldn't need to observe you, you can leave straight afterwards.
- Being awake means that you know what is happening but you shouldn't feel any pain: After a local anesthetic is given you can feel things (but not pain) and you can see if you like. Lots of young people enjoy watching the imaging on the x-ray machine and have lots of questions!

After the treatment

It is normal to have some pain and swelling for the first few days after the treatment (regardless of whether it has been done with general anesthetic or awake with local anesthetic). Regular children's pain medication (paracetamol and ibuprofen) should be used and you (your child) should rest for the first few days.

For more information on Venous malformations:

Please visit -
www.birthmarksupportgroup.org.uk/types-of-birthmark/venous-malformation-(vm).aspx

For more information about the Imaging Department and your scan.

Please visit - www.children.nhslothian.scot/the-rhcyp

What if I do not speak English?

If you need help with the English language please phone **0131 312 0896** as soon as possible and we can arrange an interpreter for you.

Edinburgh Children's Hospital Charity

NHS Lothian

Information about

Sclerotherapy
for
Venous malformations

At Royal Hospital for Children
And Young People
Little France
Edinburgh
EH16 4SA

Tel 0131 312 0896

SCAN and Find more information about Scans and X-rays

v3.0 approved by NHS Lothian Patient Information Feb 25, Review: Feb 28

Information for parents and carers –

Venous Malformations

What is a venous malformation?

Veins are a normal part of the body's circulatory system - they transport blood back to the heart from different parts of the body. A venous malformation occurs when a collection of veins develop abnormally or they develop in an abnormal place. When the venous malformation forms near to the skin surface it can be seen and felt as a lump. It may also give the overlying skin a bluish colour.

How do you diagnose a venous malformation?

We diagnose venous malformations using imaging, usually ultrasound, but sometimes we use other scans like an MRI.

Can a venous malformation cause other problems?

Because the blood flow in the venous malformation is slow, the blood can pool, making the venous malformation get bigger throughout the day, and sometimes painful. Sometimes the slow moving blood inside them can clot, causing pain and swelling.

When do you treat venous malformations?

Not all venous malformations need to be treated. Generally treatment is needed if the venous malformation is causing pain or interfering with important functions (breathing, feeding, movement) or if it is at a site that is awkward, for example if it gets rubbed by clothes or knocked during activities.

What are the treatment options for venous malformations?

Not all venous malformations need to be treated, and not all venous malformations can be treated. We work together as a team of specialist doctors to decide, with you, what the best options are for treatment.

- Compression garments (a specially fitted item that is worn tight around the area of the venous malformation - by keeping the venous spaces squashed it reduces the amount of blood that can pool there). Compression garments can be particularly helpful to manage the symptoms (swelling and discomfort) of venous malformations that affect the limbs.
- Surgical removal of venous malformations can sometimes be considered but this leaves a scar and the venous malformations can often be difficult to remove entirely and may reoccur.
- Sclerotherapy is a less invasive way to treat venous malformations.
- Laser therapy can be used to treat some skin changes that result from venous malformations. Laser therapy uses heat and light to shrivel up the tiny surface veins. This is arranged and performed by a plastic surgeon.

Sclerotherapy

Sclerotherapy can be used to improve the pain or discomfort of a venous malformation by causing the abnormal veins to close up. Sclerotherapy doesn't change the stroma (the tissue surrounding the veins – also part of the venous malformation) that is around the abnormal veins so it doesn't always reduce the size of the malformation.

During sclerotherapy treatment we (a radiologist = an imaging doctor) inject the abnormal veins within the venous malformation with a special medicine called a sclerosing agent. We use ultrasound and x-rays to make sure we are injecting in the right place and we do it as a sterile (clean) procedure.

Sclerotherapy can reduce the size of the venous malformation by causing the veins to shrink and scar. It can also often help to reduce the pain/discomfort you (your child) experience. We usually need to do a course of injections, so about 3 separate injection procedures over about 6 months.

Will I be awake or asleep during sclerotherapy treatment?

You can chose what is best for you and your family. Generally, the sclerotherapy treatments on younger patients are performed asleep, while older and more mature children will have it performed while they are awake. There are a number of things to consider when making this decision:

General anaesthetic (asleep)

- **Fasting:** If sclerotherapy treatment is performed asleep, you will need to come to the hospital for 8am (for a morning list) or 11am (for an afternoon list) and have to fast (not eat anything) from the evening before. The order in which operations on any day are performed is decided on the day and so sometimes you might have to wait (and remain fasted) until the end of the list. Generally, we try and put young children early on the theatre list as they find it hard to be hungry for long periods.
- **Remaining in hospital:** after any anesthetic we like to keep a patient in hospital for observation for around 4 hours. Even after this you/your child will still feel a bit drowsy from the anesthetic.
- **Risk of anesthetic**: Anesthetists (the specialist doctors who put patients to sleep for operations and procedures) are highly skilled and have a lot of experience giving anesthetics to children and it is a safe controlled thing to do but there are always some risks associated with having a general anesthetic.
- **You (or your child) won't be aware of what is happening during the procedure**: This is a good thing for younger children who would not be able to understand what was happening and who could find that stressfull.