

Patient information

Sclerotherapy for Arteriovenous Malformation AVM

Interventional Radiology Department

What is sclerotherapy?

Sclerotherapy is a treatment that has been around for a long time but its use is increasing in specialist centres like Alder Hey and the Liverpool University Hospitals Foundation Trust. It involves the injection of a chemical that causes deliberate damage to an abnormal structure within the body.

Sclerotherapy is mainly a symptomatic treatment, that is to say it is most effective in taking away any symptoms such as pain or discomfort, swelling, a discharge or recurrent infection.

Sclerotherapy cannot make the underlying abnormality disappear but may make it smaller and more manageable.

You will probably need several treatments over a period of time; because everyone is different it is very difficult to predict at the outset how many treatments will be required.

When is sclerotherapy used?

Sclerotherapy is used in the treatment of arteriovenous malformations (AVM).

What chemical is used?

In arteriovenous malformation the main chemical is absolute alcohol. Sometimes we also use a type of glue called Onyx.

What are the benefits of having sclerotherapy?

The main benefit is that sclerotherapy in AVM is more effective than traditional open surgery, and can be curative. Sclerotherapy with alcohol is usually performed as a day case and in all cases a general anaesthetic is required.

What is the aim of sclerotherapy?

As has been mentioned sclerotherapy often does not result in a cure of the underlying abnormality but it does make the abnormality easier to live with and allow you to lead a normal life.

What are the side effects of sclerotherapy?

There are side effects to the treatment, some people can have no side effects, some can have marked side effects.

The side effects can involve, minor bleeding, bruising to the site treated, swelling that last a few days and increased pain for up to two weeks. There can also sometimes be some pigmentation of the skin following sclerotherapy.

What are the risks of having sclerotherapy with alcohol?

Alcohol has been used for many years in the treatment of AVMs, often when there is no alternative. It is generally safe in the doses that are used during the treatment of AVM.

It is a toxic drug and in a small number of cases increases the blood pressure in the circulation to the lungs (pulmonary hypertension) This generally reverses with treatment, but there have been a small number of deaths worldwide in patients having alcohol.

We have modified the dosage to reduce the chance of this happening and the risks are rare, in the order of one death in 10000 cases.

Alcohol is only used in cases in which there is no alternative and in which the underlying condition is life-threatening and causing significant issues with quality of life.

Your consultant will have a detailed discussion with you about the risks and benefits of treatment in all cases.

Infection can occur after any needle has been through your skin.

If any of the chemical leaks in to the local area a chemical burn can form on your skin resulting in an ulcer.

If you are worried about any of these risks, please speak to your Consultant or a member of their team.

Are there any alternative treatments available?

There are alternative treatments but these often involve extensive and complex surgery, this has much greater risks than sclerotherapy and while it has good short term results in the long term the results are much less satisfactory.

If sclerotherapy proves to be ineffective then it does not prevent any alternative therapy being performed and in certain cases combined sclerotherapy and surgery can be a very effective treatment.

Laser therapy to abnormalities affecting just the skin is a very effective alternative treatment.

Why do I have to travel to Liverpool for sclerotherapy?

There are other centres that perform sclerotherapy but Liverpool has a great deal of experience of sclerotherapy over many years of practice.

What will happen if I decide not to have treatment?

Often to do no treatment is the correct thing to do with these abnormalities, but if it is causing symptoms then sclerotherapy can usually reduce the severity or frequency of symptoms. We are very much guided by you and how you feel.

It is your absolute right to refuse any treatment and this will not affect your medical management. If you decide not to have sclerotherapy treatment we will inform the clinical team that referred you and they will organise to see you in clinic and discuss alternative therapies.

Getting ready for your sclerotherapy procedure.

There are no special preparations prior to your sclerotherapy.

The procedure will be carried out under general anaesthetic you will be asked to fast for this.

The day of your sclerotherapy you will be assessed by the doctor performing the procedure. If sclerotherapy is appropriate then you will be asked to sign a consent form for the procedure and then will have the procedure. Most sclerotherapy treatments are done as a day case so you will go home once you have recovered from the anaesthetic.

After a treatment there is usually pain and swelling of the injected area. There is often a tiny amount of bleeding and bruising around the site of injection as well.

The most effective pain killer is Ibuprofen or a similar non-steroidal anti-inflammatory pain killer. These are commonly taken pain killers and are available over the counter. It is the anti-inflammatory part of these tablets that make them particularly effective.

Stronger prescription pain killers are sometimes less effective because they lack the anti-inflammatory element and have undesirable side effects.

Ice is also helpful, ice or frozen food, e.g. peas can be wrapped in a towel and applied to the skin for five or ten minutes and is also effective at reducing pain and inflammation.

The more swelling and pain there is following an injection often the more effective the treatment is in the long term.

You will be discharged once you have recovered from the anaesthetic

Going Home after the procedure

A responsible adult will need to pick you up and be available to look after you for the next 24 hours. The dressing can be removed the following day.

For next 24 hours you must not:

- Travel alone.
- Drive any vehicle.
- Operate machinery (including domestic appliances such as a kettle).
- Climb ladders.
- Make important decisions, sign any business or legal documents.
- Drink alcohol.
- Return to work within 12 hours of treatment. Your general health and any medicines you are taking may increase the time you need off work.

You should

- Take it easy for the rest of the day, avoid strenuous activity.
- Take your medications as usual.
- Let someone else care for anyone you usually look after, such as children or elderly or sick relatives.

Discharge Information

- You must bear in mind that there will be pain and swelling after a treatment so you will probably not be able to drive after a treatment for a day or two.
- There is often most swelling and pain the day after the procedure so it may be wise to take regular Ibuprofen for the first couple of days until the swelling and pain improve. An ice pack or hot water bottle may help.
- Keeping the injected area raised can help reduce the swelling and massage of your affected area can help any fluid disperse.
- Occasionally further medication is required but this is very rare.
- Usually the swelling and pain settle rapidly during the first couple of days following the injection.
- After treatment try and lead a normal life. If you notice any changes that may be related to the treatment make a note of them and inform us on your next visit.

Important Information

- **If the whole limb becomes very swollen, painful or discoloured please contact us immediately for further advice.**
- **If your skin becomes black or very white or an ulcer forms please contact us immediately for further advice. If you have any concerns or worries please contact us.**

Pain relief and medication

As mentioned above regular Ibuprofen is the most effective pain killer after sclerotherapy.

Getting back to normal

The aim of sclerotherapy is to get you to lead as normal life as possible and after treatment you should try and return to your normal routine as quickly as possible. Most people are able to return to work the next day or after a couple of days

Further Appointments

Usually a follow up appointment will be made before you leave the department after your treatment and will be posted out to you. If this is inconvenient please contact the department to rearrange a time and date.

If a previous treatment has been effective and you think you no longer need sclerotherapy please contact us because somebody else can have your appointment and also get the benefits of sclerotherapy. A follow up appointment is easily made by contacting us directly if you have had previous sclerotherapy treatments.

Further treatment

One of the advantages of sclerotherapy is that it can be performed many times but the purpose is not to cure it is to get your symptoms under control so there is a limit to the number of treatments we will recommend.

Feedback

Your feedback is important to us and helps us influence care in the future.

Following your discharge from hospital or attendance at your outpatient appointment you will receive a text asking if you would recommend our service to others. Please take the time to text back, you will not be charged for the text and can opt out at any point. Your co-operation is greatly appreciated.

Further Information

Interventional Radiology

Tel: 0151 706 2744

Text phone Number: 18001 0151 706 2744

NHS 111 Service

Tel: 111

Author: Imaging Department

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