

Treating a Brain Vessel Abnormality Under X-Ray

Information for patients

This information sheet is designed to give you an overview of what the procedure involves. This is not a replacement for discussing the procedure and risks with your doctor and you and your family should feel free to ask any questions you may have.

What is Embolisation?

An **embolisation** procedure is used to treat a brain vessel abnormality, such as an aneurysm or an arterio-venous malformation (AVM). This will be carried out under a general anaesthetic, and you will be required to stay in hospital for 2-3 nights. The reasons for having the procedure will have been discussed with you in clinic with the Interventional Neuroradiologist who will perform your procedure. Take time to think about what you've discussed and speak to your family and friends about it. You'll re-discuss the procedure on the day of your admission and are encouraged to ask any questions which have arisen since your clinic appointment.

What happens when I come in?

The afternoon before your procedure, you will be admitted to a ward under the care of your Interventional Neuroradiology Consultant. One of the neurosurgical team will speak to you about your general health, take blood tests and do a trace of your heart. You will see the Interventional Neuroradiology consultant to go through the reasons, risks and the benefits of the procedure again, answer your questions and complete a consent form. You should feel happy that you understand everything and that your questions have been answered before signing the form. You will see the consultant, along with the clinical nurse specialist, regularly throughout your stay.

You may be started on blood thinning tablets the evening before or morning of your procedure. The reasons for this will be explained to you as it only applies to some patients.

What does the procedure involve?

An embolisation of a brain vessel abnormality involves a general anaesthetic. You will meet the anaesthetist before your procedure to discuss any medical conditions you have which might concern you or your anaesthetist. You will be asked not to eat or drink from midnight before the procedure. If you feel anxious about any of this, please speak to the anaesthetist.

The embolisation procedure itself involves inserting a small tube (known as a catheter) into one of the blood vessels in the groin or the wrist. This is then taken through the blood vessels of the body up to the blood vessels in the neck which supply the brain. A dye (also known as a contrast agent) is then injected through the catheter and x-ray pictures are taken as the dye flows through the vessels, allowing your consultant to see the vessel abnormality clearly. The treatment can then be carried out. The general method used in the treatment will be made clear to you before the procedure, although often the exact technique depends on the pictures taken at the start of the case.

The procedure usually takes between 1-2 hours. As it involves a general anaesthetic, please let your family know that you will be away for 3-4 hours, as you will spend some time in our recovery area.

You will spend the night after your procedure in the acute care room on ward 130; this is routine practice and nothing to worry about. You will have a urine catheter, a 'drip' line in your arm and a line in your wrist which allows us to monitor your blood pressure without disturbing you overnight.

Summary of the procedure risks

All procedures carry risk, and the risk of each procedure varies depending on what is being done and your individual circumstances. In clinic you will have discussed the benefits and the risks of your treatment and weighed this up against the benefits and risks of conservative management (leaving the abnormality alone). These risks will be discussed again before signing your consent form. You are encouraged to discuss these risks with your family and friends and ask your consultant any questions you have. Below are some broad categories of risks involved with brain blood vessel procedures.

Brain complications: There is a small chance of bleeding or clotting in the brain, which could be mild and controllable but could be severe and lead to disability or death.

Access Vessel Damage: About 1 in 25 people will get a large bruise (called a haematoma) where the needle goes into the blood vessel in their groin or wrist. Rarely, the vessel used for access could get damaged and either bleed too much or block off, which could threaten your hand, your leg or your life and require surgery.

Allergic reaction: 1 in 100 people will have an allergic reaction to the dye that is used (but these reactions are rarely serious).

Anti-platelet medication: Less than 1 in 100 people will have a bleed in the head or the gut due to taking blood thinners which requires hospitalisation. There is a very small risk of death from this.

Other very rare but serious complications: These include infections, kidney injury and damage caused by the urinary catheter.

Radiation Risk

X-rays are required so the doctor can see the blood vessels in your brain and treat the abnormality. The benefits of the procedure hugely outweigh the very low risks of the x-rays themselves.

Every day we are exposed to some natural background radiation from the environment we live in. Each medical x-ray gives us a small additional dose on top of this natural background radiation. An aneurysm treatment is equivalent to 1-2 years, whilst AVM treatment is equivalent to 3-4 years of natural background radiation. It is important to note that the amount of x-rays used will carry a low risk.

Summary

All procedures carry risks, which will be explained to you in detail. If you are having treatment, these risks are thought to be lower than leaving the abnormality alone. Though it is important to know about these risks, it is also important to remember that most people don't suffer any complications.

There will be plenty of opportunity to discuss anything you might be worried about with either your consultant who is carrying out the procedure or your anaesthetist. Should you have any urgent concerns regarding the procedure or the use of x-rays in the meantime please contact:

Clinical Nurse Specialist for Interventional Neuroradiology: **0131 312 0863**

Keeping your Appointment

If you cannot keep your appointment, or have been given one that is unsuitable, please change it by phoning the number on your appointment letter. Your call will give someone else the chance to be seen and will help us keep waiting times to a minimum.

Public Transport and Travel Information

Bus details available from:

Lothian Buses on 0131 555 6363 or www.lothianbuses.co.uk

Traveline Scotland on 08712002233 or www.travelinescotland.com

Train details available from:

National Rail Enquiries on 03457 484 950 or www.nationalrail.co.uk

Patient Transport

Patient Transport will only be made available if you have a medical/clinical need. Telephone **0300 123 1236** *calls charged at local rate up to 28 days in advance to book, making sure you have your CHI Number available.

Hard of hearing or speech impaired? Use text relay: **18001-0300 123 1236*** (calls charged at local rate). To cancel patient transport, telephone 0800 389 1333 (Freephone 24 hr answer service).

Interpretation and Translation

Your GP will inform us of any interpreting requirements you have before you come to hospital, and we will provide an appropriate interpreter. If you are having this procedure as an existing in patient, staff will arrange interpreting support for you in advance of this procedure. This leaflet may be made available in a larger print, Braille or your community language

Should you have any urgent concerns please contact:
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