

Information for patients and carers

Flow Diverting Stent for the Endovascular Treatment of a Cerebral Aneurysm

What is a cerebral aneurysm?

A cerebral aneurysm is a bulging, weakened area in the wall of an artery in the brain. The constant flow of blood into the brain can cause this weakness to enlarge and balloon outwards.

There is a risk that this aneurysm can burst and cause a bleed in the brain known as subarachnoid haemorrhage, which is why treatment is offered.

What is a flow diverting stent?

A flow diverting stent is a tightly woven artificial tube, which acts like a sleeve inside the artery to divert the flow of blood away from the aneurysm.

How do I prepare for a flow diverting stent?

Prior to the procedure you will have been asked to take blood thinning tablets for the 5 days leading up to the procedure, or as advised in the pre-op clinic.

On the day of your procedure, you will be asked to arrive at the admissions lounge located on the neurosurgery ward.

You are requested not to eat from 12 midnight prior to your procedure. However, you may drink water until 6am.

You will be asked to change into a hospital gown and remove your underwear. Please leave any jewellery at home if you can.

You will be staying in the hospital for up to 2 to 3 days or until you have fully recovered so please pack a bag with overnight clothes, toiletries and any medications you will require.

There may be emergency cases that take clinical priority on the day that you are admitted. Should this occur, we will keep you informed and perform your procedure as early in the day as possible. In cases where we are unable to proceed, we may ask you to stay overnight and perform the procedure the following day.

It is important to let the medical team know if you think you may be pregnant, or if you have any medical conditions such as; asthma, diabetes, clotting problems, kidney problems or if you have ever had an allergic reaction to iodine.

Where will the procedure take place and who will perform it?

The procedure will take place in the Neuro X-Ray Suite at Royal Preston Hospital. The procedure will be performed by a specialist doctor called a neuro interventional radiologist. The other staff involved in your care and who will be in the room during the procedure are; an anaesthetist, radiographers and nurses.

Consent for the procedure will be taken by the neuro interventional radiologist, at which point you will be given the opportunity to ask any questions about the procedure.

What will happen during the procedure?

The procedure will take 2 to 3 hours to perform under general anaesthesia.

You will be taken into the Neuro X-Ray Suite which contains two specialist X-Ray machines (see image on page 4). You will be asked to lie on your back on the X-Ray table. Monitoring equipment will be attached to your chest, arm and finger to check your heart rate, blood pressure and oxygen levels.



The anaesthetist will insert a needle in one of the veins on the back of your hand and put you to sleep using a general anaesthetic.

This is a minimally invasive procedure in which a small plastic tube called a catheter is inserted through the artery in the groin. A dye containing iodine will be injected throughout the procedure, whilst X-Rays are taken to aid the radiologist navigate the catheter across the aneurysm. The flow diverter will then be placed into position.

Once the procedure is completed a closure device will be inserted to close the artery.

Are there any risks or potential complications?

All aneurysm treatments carry some risk and will be discussed with you prior to the procedure.

The most common complication is that you may have bruising in the groin where the catheter was inserted. This is usually a small bruise which can vary with each individual.

Occasionally people develop an allergic reaction to the dye which is used during the procedure, but this is rare.

As we are using X-Rays during the procedure for a prolonged period of time, there may be some hair loss. Modern equipment and techniques are designed to keep the radiation dose to a minimum.

Procedures involving the blood vessels of the brain carry a small risk of stroke. This can range from a minor problem, which gets better over time, to a severe disability involving movement, balance, speech, vision or even a threat to life.

Headaches are quite common after aneurysm treatments. Routine pain killers, rest and drinking plenty of water will help.

You may have been asked to take blood thinning medication prior to the procedure and for some months afterwards. These tablets can increase the risk of bleeding in other areas of the body and can irritate the stomach.

All general anaesthetics carry a degree of risk; this will be explained to you prior to the procedure by the anaesthetic team.

What happens afterwards?

Following the procedure, you will be nursed on the ward, where you will be closely monitored. You can expect to stay in hospital for between 2 to 3 days or until you are fully recovered. You should avoid heavy physical activity for at least 2 weeks following the procedure.

The nurses on the ward will carry out regular observations and ask questions to assess that you are aware of your surroundings. Your blood pressure and pulse will also be monitored, as well as your groin for signs of bleeding, excessive bruising or swelling. It is normal to have some bruising at the skin around the groin.

What follow up will I receive?

You will be seen at the routine Neuro Vascular clinic following discharge to discuss the outcome of the procedure.

A repeat cerebral angiogram will be arranged at 6 months followed by a further MRI brain scan at 12 months.

Contact details

Appointments: **01772 523459**

Specialist Nurse: **01772 528422**



Sources of further information

www.lancsteachinghospitals.nhs.uk

www.nhs.uk

www.patient.co.uk

www.accessable.co.uk

www.nhs.uk/conditions/brain-aneurysm/treatment/

www.brainandspine.org.uk/our-publications/our-fact-sheets/coiling-of-brain-aneurysms/

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If you want to stop smoking, you can also contact Smokefree Lancashire on Freephone **08081962638**

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