

Information for patients and carers

Cerebral Angiogram

A decorative graphic at the bottom of the page consisting of three overlapping, wavy bands of blue. The top band is a light blue, the middle is a medium blue, and the bottom is a dark blue.

What is a cerebral angiogram?

A cerebral angiogram is a diagnostic test which examines the blood vessels in the brain and neck using X-rays and a dye. The dye is injected through a plastic tube called a catheter, which is inserted into the artery in the groin.

How do I prepare for a cerebral angiogram?

On the day of your procedure you will be asked to attend 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.

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. We advise that you bring some overnight clothes and any medications you take; otherwise, a new date will be scheduled.

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

Consent for the procedure will be taken by one of the neuro interventional radiologists, providing an opportunity for you to ask any questions you may have about the procedure.

What will happen during the procedure?



The procedure normally takes approximately 1 hour to perform. You will be taken into the Neuro X-ray Suite which contains the specialist X-ray equipment (see image). Monitoring equipment will be attached to your chest, arm and finger. This is to check your heart rate, blood pressure and oxygen levels. You may also be given oxygen during the procedure.

The anaesthetist will insert a needle in one of the veins on the back of your hand through which intravenous fluids can be given and/or a light sedative to help you relax throughout the procedure. This does not put you to sleep like a general anaesthetic.

Once the team are ready, a checklist will be read out to confirm your details.

The skin around your groin will then be cleaned and local anaesthetic will be injected. This will sting for a short time and the area will become numb so you should not be able to feel anything.

A long plastic tube called a catheter will be inserted into the blood vessel in the groin and then navigated to the main blood vessels which supply blood to the neck and brain. Once in position a dye containing iodine will be injected through the catheter and a series of X-rays will be taken. The X-ray machines will move around you but will not touch you. During the injection of dye you may experience a warm feeling. Some people see flashing lights or complain of hearing buzzing noises and/or experience a strange metallic taste. All of these sensations are normal and should pass very quickly.

During the procedure it is important that you stay as still as possible in order for us to obtain the best possible X-ray images of your blood vessels. A closure device will be inserted at the end of the procedure to close the artery. Occasionally the radiologist may have to press on the groin if a closure device cannot be used.

Are there any risks or potential complications?

A cerebral angiogram is a minimally invasive procedure; side effects or complications can occur. We will take every precaution to minimise these risks.

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.

Some people complain of a headache for a few hours after the procedure. A mild painkiller, rest and drinking plenty of water will help. Headaches may occasionally last a few days.

You may find that you are unable to see clearly after the procedure. Some people complain of blurred vision which should be temporary and soon settle.

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

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, or vision.

X-rays are used throughout the procedure and although there are risks involved with radiation, modern equipment and techniques are designed to keep the dose to a minimum. We use the smallest dose possible, in line with national regulations, to provide as much information as possible for the consultant.

What happens afterwards?

You will be taken to the ward area or day case unit on a bed where you must remain for a minimum of 4 hours. You may have the head of your bed elevated slightly for comfort, but you must keep your legs straight to prevent additional pressure on your groin. You may eat and drink as normal.

The nurses 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. The nurses will also assess your groin area for any signs of bleeding, excessive bruising or swelling. It is normal to have a little bruising around the groin area.

Once you recover from the procedure you will usually be allowed to go home after a minimum of 4 hours. Should you experience any side effects and need to be more closely monitored you may be kept overnight for observation.

Please make arrangements for a relative or friend to collect you from the hospital as you must not drive, nor do we recommend the use of public transport. A responsible adult must stay with you until the following morning, and you must have access to a telephone.

Minimise excessive physical activity for 48 hours. Avoid tasks that put additional pressure on your groin. This includes sexual activity, driving,

unnecessary stair climbing, long walks, lifting heavy objects etc. After 48 hours you may resume normal activity.

Care of the puncture site

Check the puncture site for swelling or hardness. A small lump and bruising at the site is common and normal. You may experience some minor discomfort, but you should be able to restart normal activities within 48 hours.

If the lump grows in size or you notice numbness, tingling, redness, warmth or pain down your leg you must visit your local emergency department.

If the puncture site bleeds heavily (this is very rare), please apply firm pressure just above the site and telephone 999 for an ambulance.

It is not advisable to have a hot bath or shower for 24 hours after the angiogram, a warm tepid shower is acceptable.

Always keep the puncture site clean and dry, avoid swimming until it is healed.

You will be given a patient information card for the closure device which you should carry with you in your purse or wallet for the next 90 days. The closure device is MRI compatible.

When will I receive my angiogram results?

The neuro interventional radiologist or specialist neurovascular nurse will discuss the provisional angiogram results with you after the procedure. However, your angiogram results will then be discussed at the neurovascular multi-disciplinary team meeting, following which we will write to both you and your GP with the results.

Contact details

Appointments: **01772 523459**
Specialist Nurse: **01772 528422**

Ward 2A: **01772 522217**
Ward 2B: **01772 522713**
Ward 2C: **01772 528162**



Sources of further information

www.lancsteachinghospitals.nhs.uk
www.nhs.uk
www.patient.co.uk
www.accessable.co.uk
www.nhs.uk/conditions/angiography/

All our patient information leaflets are available on our website for patients to access and download:

www.lancsteachinghospitals.nhs.uk/patient-information-leaflets

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

Please ask a member of staff if you would like help in understanding this information.

This information can be made available in large print, audio, Braille and in other languages.

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Division: Diagnostics and Clinical Support

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