



Imaging



**Brighton and Sussex
University Hospitals**
NHS Trust

Angiogram

What is an angiogram?

An angiogram is used to take detailed pictures of arteries using x-ray guidance. Normally blood vessels do not show up on x-rays. However by injecting a special fluid called contrast medium (sometimes also called an x-ray dye) into an artery through a special fine tube called a catheter as you are being x-rayed, detailed images of your arteries can be produced.

Why do I need an angiogram?

Your doctors feel that there may be a problem with part of your circulation. Other tests such a CT or MRI that you might have had done can provide useful information, but it is felt that in your case the best way of obtaining detail required is by an angiogram.

Who has made the decision?

The consultant in charge of your case, and the Interventional Radiologist (the doctor who specialises in imaging procedures) who will be carrying out the angiogram will have discussed the situation, and feel that this is the best way to diagnose you. However, you will also have the opportunity for your opinion to be taken into account and if, after discussion with your doctors, you do not want to have an angiogram, then you can decide against it.

Who will be doing the angiogram?

A specialist doctor called an interventional radiologist. Interventional radiologists are experts in using X-ray equipment and in microsurgical techniques.

Where will the procedure take place?

In the imaging department, in a special Interventional Radiology (IR) procedure room which is designed for these specialised procedures. You will be checked into the department by a nurse, who will ask some medical questions and fill out some paperwork. The interventional radiologist will then come and talk to you. You will have the opportunity to ask any questions or raise any concerns, and only if you are happy to continue with the angiogram will you be asked to sign the consent form.

What actually happens during the angiogram?

It is performed in the Interventional Radiology(IR) procedure room.

- You will lie on a special x-ray table on your back and be covered with sterile drapes. Your groin area will be cleaned with an antiseptic solution. Local anaesthetic will be injected to numb your groin and stop you feeling pain.
- When the groin is numb a needle will be placed into the artery in your groin.
- A guide-wire is then placed through the needle into the artery and the needle withdrawn.
- A fine tube is then placed over the wire and positioned in the artery.

- Then a catheter is placed in the artery the radiologist would like to look at and x-ray dye injected. This is when the pictures are taken.

Once the radiologist is satisfied that all the information required has been obtained the tube in the groin is removed and the radiologist will press firmly on the entry point for up to 15 minutes prevent bleeding.

How do I prepare for an angiogram?

To prepare for the procedure you will need to make sure you do the following:

You will need to have a blood test before your procedure. Please let us know if you are taking any **antiplatelet medicines** (for example, Aspirin, Clopidogrel) or any **medicines that thin the blood** (for example, Warfarin), as these may need to be stopped temporarily before the procedure. Call the IR department for advice as soon as you get your appointment letter on **01273 696955 Ext. 4240/4278** and ask to speak to one of the IR nursing team.

If you are taking **medicines for diabetes** (for example metformin) or using insulin, then these may need to be altered around the time of the procedure. Call the IR department on the numbers above for advice as soon as you get your appointment letter.

You cannot eat or drink anything (except water) for four hours before your procedure. You can drink water up to two hours before your procedure.

You will need a responsible adult to take you home.

Will it hurt?

When the local anaesthetic is injected it will sting for a moment but the stinging will wear off, leaving that area of skin numb. After this, the angiogram should not be painful: however if you feel discomfort, there will be a nurse with you who will be able to arrange for further anaesthetic or sedation, if it is required. After the contrast medium (x-ray dye) is injected you will get a warm sensation. You will be awake for the procedure and you will be able to tell the nurse or radiologist if you feel any pain or are uncomfortable in any other way.

How long will it take?

Whilst every patient and every patient's situation is different we allow an hour for the procedure.

What happens afterwards?

You will be required to recover in our recovery area on a trolley and will stay in the department for up to 4 hours after the procedure. You will need to lie flat for 1 hour after the procedure. The nurses will carry out routine observations, blood pressure, pulse and monitoring of the skin entry point, to ensure there is no bleeding. We will provide you with something to eat and drink if required after the angiogram. Please arrange for someone to pick you up and take you home and remain with you for 24 hours following the procedure, as you must not drive or use public transport or be at home alone.

What are the risks?

Despite the possible complications the procedure is normally very safe. However, the following side effects may occur:

Bruising in the area the catheter was inserted. This is rare and usually resolves within a few days.

Some damage to the artery, caused by the catheter (this is very rare). This may need to be treated by surgery or another radiological procedure.

There is a small risk of bleeding after the angiogram that may include bleeding under the skin (haematoma) this is why there is a period of recovery after the procedure.

In some cases the artery can leak into the groin which can result in a pseudo aneurysm (a blood filled sac) that may require further treatment.

The Radiologist will discuss all risks with you during the consenting process and you can decide if you want to proceed during that time.

What are the benefits?

Having an angiogram will help your doctor make a diagnosis so that you can get any required treatment.

Scans alone are not always enough to determine the cause or degree of abnormalities, and this is the best way to get a detailed picture of the arteries of interest.

After the procedure

Typically, patients are observed in hospital for up to 4 hours and go home the same day.

You will need to rest for the remainder of the day, and possibly the next day depending on your recovery. You can then resume your normal activities but should avoid heavy lifting for 48 hours.

You will need to have a responsible adult to take you home and be with you overnight.

Continue with your normal medication as prescribed, unless otherwise advised.

If you are having some mild pain you can take over-the-counter painkillers (follow the instructions on the packet).

Do not drive for 24 hours after the procedure.

The results will be sent to your referring consultant and also discussed with you on the day of the procedure by the radiologist.

If you feel you need urgent medical attention or are worried about anything please contact the IR department Monday - Friday 9am - 5pm, your GP, or go to your nearest A&E department.

Finally

Some of your questions should have been answered by this leaflet but remember that this is only a starting point for discussion about your treatment with the team looking after you.

Make sure you are satisfied that you have received enough information about the procedure before you sign the consent form.

Interventional Radiology:

01273 696955 Ext. 4240/4278

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Disclaimer

The information in this leaflet is for guidance purposes only and is in no way intended to replace professional clinical advice by a qualified practitioner.

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