

INFORMATION FOR PATIENTS

Cerebral Angiography



Introduction

Cerebral angiography is a test to examine abnormalities of the blood vessels of the brain. It is also used to examine the results of aneurysm coiling to ensure the aneurysm treated has not re-grown. Discussion will have taken place with your clinician before a decision to have an angiogram is made. Angiography is the best test currently available for your condition and this leaflet aims to answer any questions you may have.

Before the procedure

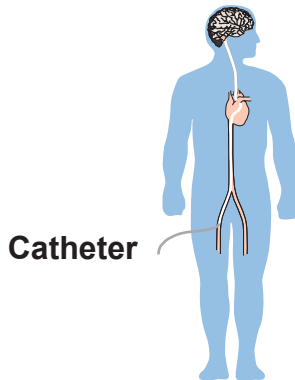
You will be asked not to have solid food for 4 hours before the procedure. You will be admitted to the ward on the morning of the procedure, or occasionally the day before. A nurse will ask some questions to make sure you are fit to undergo the investigation. You will be changed from your normal clothes into a hospital gown for the procedure. You will sign a consent form. This will explain why the angiogram is necessary and what the risks of the procedure are.

The X-ray (Radiology) department

You will be taken to the x-ray department. A nurse there will greet you and go over the procedure again and ask a few more questions (*e.g. check for allergies*). You will be taken into the angiography room on a trolley and placed on the angiography table. A nurse will be present at all times during the procedure to assist both the doctor and you. A radiographer is present who will steer the x-ray machine and will also produce the pictures for diagnosis.

The procedure

The doctor performing the procedure will be a specialist in neuroradiology who will have performed many examinations previously. One (*usually the right*) or both groins will be thoroughly cleaned and sterile drapes will be placed over you. Please try to keep your arms still at this point to avoid contaminating the drapes. A clip to monitor your pulse will be attached to a finger and a cuff is attached to your arm to monitor your blood pressure. A band will be placed around your head to remind you to keep still. Local anaesthetic (*numbing solution; the same as your dentist uses*) is injected around the groin to make the procedure more comfortable. A small catheter is then placed in the artery and navigated into the blood vessels in the neck: you will not feel this at all.



X-ray dye (*contrast*) is then injected to take the pictures. The x-ray tube may come close to you for a short time. As the dye is injected you may feel a warm sensation over your head. This is rarely unpleasant and is not painful. Some injections may give you the sensation of flashing lights behind your eyes and a metallic taste in your mouth. This is normal and goes away quickly. The x-ray machine makes a noise as it is taking pictures with the dye in

your blood vessels. It is very important you keep still at this point; sometimes the abnormalities being studied are very small.

The procedure usually takes between ten and twenty minutes, occasionally longer if several blood vessels need to be looked at, or the vessels are difficult to get into.

When the doctor is happy with all the information, the catheter is taken out and the doctor or nurse will press on the groin for approximately ten minutes to prevent any bruising. If there is anything you are unhappy about during the procedure, please let the doctor and/or nurse know.

After the procedure

You will return to the ward after the angiogram. You will be allowed to eat and drink after the procedure.

You will be asked to lay flat on your back for at least 2 hours. This is extremely important to allow the hole in the artery to seal properly. You may find that you wish to use the toilet soon after the angiogram as the x-ray dye is washed out by the kidneys. You can use a bed pan or urinal during this time.

You will then be sat up a little for a further 2-3 hours. Then you will be encouraged to move around, with a plan to go home soon after. Somebody else must drive you home.

At home

The evening after discharge, you must stay with a responsible adult at home and have access to a telephone. It is advisable to take the following day off work, particularly if you have a job that involves physical activity. You must not engage in excessive physical activity for 48 hours (*e.g. lifting heavy weights, running, riding a bicycle*). Walk as much as feels comfortable. You can drive a car the next day if you feel well.

Your result and recommendations

The result of the angiogram will be communicated to the doctor who requested the test, and possibly also your family doctor after carefully looking at the pictures and possibly comparing these pictures with a previous angiogram or other investigations. The doctor performing the procedure may give an indication of the result directly to you. Any further tests or treatment required will be discussed with you.

Risks of Cerebral Angiography

Your doctor has requested this test as it is felt to be the best, and sometimes only way to provide the information required. Three main risks are present:

1. Related to placing the needle in the artery in the groin.

Occasionally, even with careful procedure technique and bed rest, a bruise can form. A small amount of discolouration in the groin is not unusual. The risk of a significant bruise forming (*which delays you going home, requires emergency operation or blood transfusion*) is much less than 1 in 100 (1%).

2. Related to the x-ray dye (contrast).

Even in patients without any allergies, the dye used can cause an allergic reaction. This is very rarely life threatening and can be managed effectively. The risk of this is 1 in 1,000. It is higher if you have a history of allergies to other drugs, iodine or shellfish and you **MUST** let the doctor and nurse know if this is the case.

3. Related to the arteries in the neck.

Occasionally, placing catheters in the arteries in the neck going to the brain causes damage to these vessels. Most often the damage does not cause any danger to you. However, there is a risk of causing a stroke. Sometimes this may go unnoticed. Very rarely this results in paralysis, difficulty or inability to speak or see. The risk of this is around 1 in 200 to 1 in 100 (*0.5 to 1%*) but a fraction of this in young patients. Both the doctor who requested the angiogram and the doctor performing it understand this risk but still feel they are less than the risk of not making the correct diagnosis and/or planning the correct treatment for you.

Contact Information

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