



University Hospitals Birmingham
NHS Foundation Trust



Admission for cerebral or spinal day case angiography

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What is a cerebral or spinal angiogram?

A great deal can be learnt about your medical condition from the history, physical examination and various tests with which you are already familiar. However, certain information can only be obtained by a cerebral or spinal angiogram, where the radiologist (imaging doctor) will take pictures of the blood vessels of your brain or spine. The procedure is explained in more detail later on in this leaflet.

Cerebral or spinal angiography is performed on a day case basis, so you will usually be allowed home the same day, after a set recovery time. Occasionally, though, it is necessary to keep a patient in overnight if there are any complications or the procedure finishes late.

No specific time can be given for the investigation to be performed due to the need to maintain complete flexibility and accommodate emergency procedures. This may mean that there is a wait of several hours between admission and the procedure being performed, although every effort is made to keep this as short as possible. In extreme circumstances it may be necessary to postpone your procedure to a different day, but we will do everything possible to avoid this.

To help with the smooth running of the ward and the Angiography Suite, please follow the instructions given. This will help prevent delay for both you and other patients.

Preparing for your procedure

Medication

Please make sure to inform us if you are on any of the following medications:

- Warfarin, Dindevan, clopidogrel, aspirin, or any other blood thinning tablets
- Insulin, or any other diabetic medication

Please continue to take these medications as usual unless told otherwise, but let us know about them during your pre-screening appointment. It is helpful if you bring a list of your regular medications with you to your pre-screening appointment.

If you are taking a water tablet (such as furosemide) it is reasonable to delay taking it until after the procedure for your comfort and convenience.

Please bring all of your medications with you on the day of procedure.

Food and drink

For procedures under **local anaesthetic**, where you are not being put to sleep, please eat and drink as normal. There is **no need** to starve for this procedure.

For procedures under **general anaesthetic**, where you are being put to sleep throughout the procedure, please follow these instructions:

- Nothing to eat (including hot drinks, sweets and chewing gum) for the six hours before the procedure
- You can have sips of plain water up until two hours before the procedure

What to bring

It may be useful to bring a book or newspaper with you to help pass the time, and a pair of slippers and dressing gown for your comfort.

You may like to bring a CD of your choice which you can listen to whilst your procedure is being performed.

Arrival at hospital

Please report to the ward at the time listed on your letter, where the receptionists will book you in and your nurse will take you to your bed space. This is your admission time and not your procedure time.

Relatives /escorts are not allowed to stay on Ambulatory Care but are welcome to drop you off and pick you up to take you home.

Arranging transport

It is important to plan in advance how you will be getting home. You should not drive home after the procedure so you will need to arrange for somebody to collect you from the ward.

If you plan to use public transport, please ensure that there is a responsible adult to travel home with you.

If you travel to the hospital via hospital transport, please tell the nurse when you arrive that you will need hospital transport to take you home.

What happens on arrival?

When you arrive on the ward, you will be shown to your bed space and asked to change into a cotton theatre gown. The nurses will take your blood pressure, heart rate, oxygen levels, temperature and blood sugar readings. You will usually have attended a pre-screening appointment before this, where your full medical history will have been taken and recorded in your notes; the nurse on the ward will then confirm these details with you.

Please be advised that the angiogram will use X-rays. Any person of childbearing age (between 11–55) will be assessed for possibility of pregnancy and may be asked to provide a urine sample for pregnancy testing.

Some patients will have an MRI before their procedure. If this is the case, one of the imaging staff members will collect you from the ward and take you back once your MRI has been completed.

One of the radiologists will explain the procedure to you and will ask you to sign a consent form before the procedure can take place.

When it is time for your procedure, a member of the team will take you to the Angiography Suite.

What does the procedure involve?

In the Angiography Suite, there will be an opportunity to talk to the radiologist, nurse and radiographer who will be performing your procedure and you will be able to ask them any further questions you may have.

You will be asked to lie flat on the bed for the procedure. If you have any underlying medical conditions which make it hard for you to lie flat, please let the staff in the pre-screening clinic know before your appointment.

The staff will attach a monitor to you to measure your blood pressure, heart rate and oxygen levels regularly throughout the procedure. The radiologist will then inject the top of your leg, or the front of your wrist if the procedure is to be performed through an artery going to the hand, with local anaesthetic to numb the skin so that it doesn't hurt when they insert the catheter.

The catheter itself is a small tube (about the same thickness as a refill of a ballpoint pen or a piece of spaghetti) which is put into an artery to perform the examination. Depending on whether you are having a cerebral or spinal angiogram, the catheter will then either be passed up to your neck or to your spine, under the control of X-rays. Dye can then be injected through the catheter to show the anatomy of the head or spine and their blood vessels. These pictures are recorded and are studied by the radiologist after the procedure. When the procedure is finished, the catheter is withdrawn and pressure is applied to the puncture site for approximately ten minutes.

Occasionally, the radiologist may insert a device to close your wound. These devices dissolve naturally over 90 days and are absorbed into your system. If you have one in place, you will be given a card which you will need to carry with you for the next 90 days. For approaches through the artery to the hand an adhesive, inflatable device will be progressively deflated until there is no bleeding.

The whole test lasts about an hour, but can sometimes take longer.

Does it hurt and is it safe?

There will be some discomfort when the catheter (tube) is put in, but this is minimised by the use of local anaesthetic to freeze the skin. Once the catheter is in place, you will feel very little and most patients are unaware of its movement inside them. When the dye is injected into the vessel of interest, you will feel a warm sensation as the dye passes through your head or spine.

Although this might sound risky, the risk of major complication is low. Some bruising at the top of your leg, or at the wrist, is quite common and occasionally this can be quite widespread but fades in a few weeks. Other possible risks will be discussed with you at the time of obtaining consent.

Remember that this investigation would not be recommended unless the benefit for you greatly outweighed the very small risks involved.

Aftercare on the ward

When you return to the ward after the test is finished, you will be on bed rest for several hours. For the first half of this period you will need to lie flat to prevent any complications.

During this time you will be under careful observation by the nursing staff, who will monitor your blood pressure and heart rate, and check your wound regularly. You will be offered something to eat and drink straight away, though you may prefer to wait until you are sitting up.

Once your bed rest is over, if you are feeling well and there have been no complications, your nurse will discharge you from the ward.

What to do after being discharged

When you are being discharged, your nurse will go through the discharge advice with you, tell you what action to take if complications occur, and answer any questions you might have about your recovery period. **Please ensure you will have a responsible adult to accompany you home and stay with you overnight.**

Please follow the advice listed below:

Rest

Please rest your leg for the next 24 hours. You will also need to refrain from doing any heavy lifting, strenuous exercise or heavy housework (e.g. vacuuming) for the next seven days. If any coughing, sneezing or straining occurs during the first 12 hours, place a hand firmly over the wound site to support it. **If you have had a procedure through the artery at the wrist, please avoid any vigorous, repetitive activities with that hand for 48 to 72 hours.**

Driving

You are advised not to drive for at least 48 hours, but up to seven days if the area is still tender. You should not drive until you are able to safely perform an emergency stop.

What to do in case of bleeding

If your wound starts to bleed, lie down and apply firm pressure to the area for **10 minutes** using a swab or clean handkerchief. **If the bleeding hasn't stopped after 10 minutes, please contact us** using the contact numbers at the end of this leaflet.

If the wound is bleeding excessively, lie down and apply firm pressure and get someone to call an ambulance immediately.

Wound care and showering

Do not be afraid to take a shower. If you have a dressing over the site, it can be removed. **Baths should be avoided for the first 72 hours.** Please ensure that the wound is dried thoroughly afterwards.

Complications

Please contact Ambulatory Care for advice if you experience any of the following:

- Any change in the colour, temperature, or sensation in your leg, foot or hand
- You develop any swelling or rash-like symptoms which could indicate a reaction to the dye
- You develop a hard lump in your groin around the wound site

Please note that a certain amount of bruising is common and sometimes spreads down the thigh during the first few days. It should disappear gradually over the following week.

What if I am still worried?

There will be staff present on the day who you can talk to if you have any concerns. Remember that hundreds of these tests are performed every year and complications are rare. Most patients find it less uncomfortable and less worrying than they anticipated.

If after reading this leaflet you have serious worries, please telephone **0121 371 3765** between 08:30–16:00 and we will either answer your questions or arrange for somebody to ring you back.

Follow-up

After your procedure, your clinical team will be in contact with you to discuss the results of your angiogram.

Contact details

If you have any concerns about any aspect of your recovery at home, please do not hesitate to contact us to discuss these.

Ambulatory Care	0121 371 3120 (manned 24 hours)
Neuroradiology coordinator	0121 371 3765 (0830–1600, answer phone out of hours)
Hospital switchboard	0121 371 2000 (manned 24 hours)

If you require this information in another format, such as a different language, large print, braille or audio version please ask a member of staff or email **interpreting.service@uhb.nhs.uk**.

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