

Cerebral angiography

Information for families

**Great Ormond Street Hospital
for Children NHS Foundation Trust**

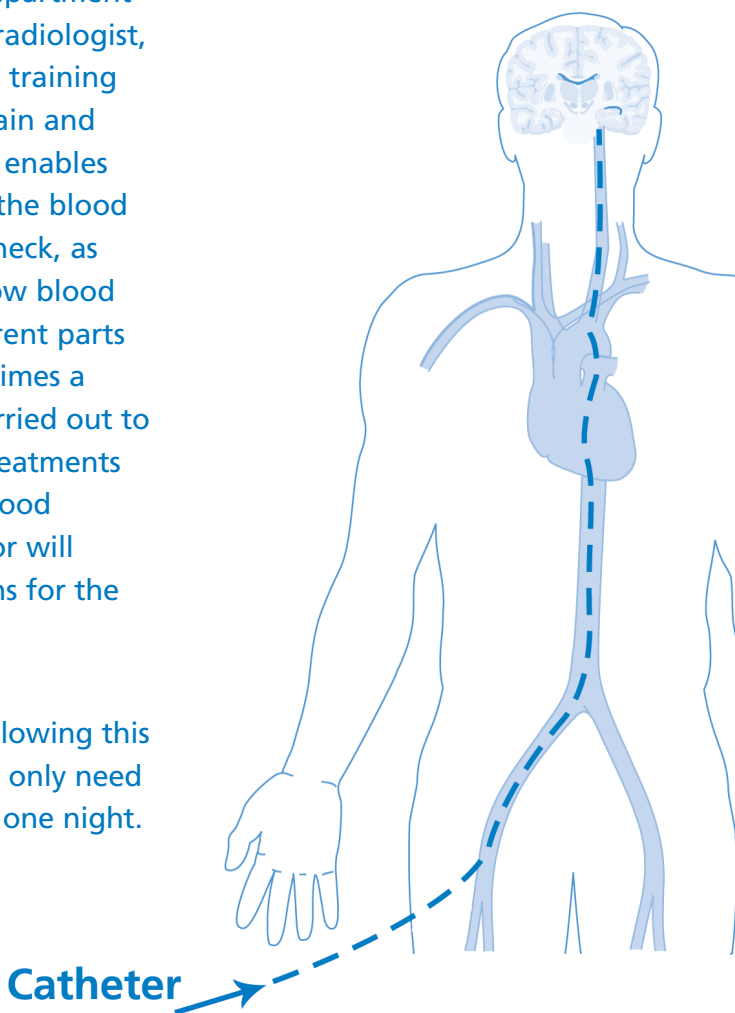
This leaflet explains about the cerebral angiography procedure and what to expect when your child comes into Great Ormond Street Hospital to have one.

What is cerebral angiography?

Cerebral angiography is a test that is carried out to study the blood vessels in the brain and neck.

It is carried out in the Department of Radiology by a neuroradiologist, a doctor with specialised training in taking pictures the brain and nervous system. The test enables doctors to see a map of the blood vessels in the brain and neck, as well as to understand how blood flows between the different parts of the circulation. Sometimes a cerebral angiogram is carried out to enable doctors to give treatments directly into abnormal blood vessels. Your child's doctor will discuss the precise reasons for the test with you.

Providing there are no complications directly following this procedure your child will only need to remain in hospital for one night.



What happens before the test?

You will already have received information about how to prepare your child for the test in the admission letter. You will need to come in the day before to see the anaesthetist and have a blood test.

The doctors will explain the test in more detail, discuss any worries you may have and ask you to sign a consent form giving permission for your child to have the test. If your child has any medical problems, particularly allergies, please tell the doctors about these.

What does the test involve?

To perform a cerebral angiogram, the neuroradiologist will insert a needle into an artery (large blood vessel) in your child's groin. This is used to pass a catheter (a narrow plastic tube) into the artery. The catheter is threaded through the arteries of the body and then carefully put into each of the four main arteries in the neck which go on to supply the brain. An x-ray will be taken to check that the catheter is in the right place. The neuroradiologist then injects dye

through the catheter and takes a series of x-ray pictures of the blood vessels and the way that the dye flows through them. At the end of the test the catheter is removed from the groin. No stitches are necessary, as only a small mark is left, which should heal completely within a few days.

Are there any risks?

Cerebral angiography is performed under general anaesthesia in children (although some teenagers may choose to be awake during the test). Although every anaesthetic carries a risk, this is extremely small. There is only a small risk of infection because no incisions or cuts are necessary. Your child may bleed from the area where the catheter is inserted, but this can be minimised by applying pressure for a few minutes after the procedure. A bruise may develop where the catheter was inserted, and some discomfort felt in this region, but pain relief like paracetamol or ibuprofen is usually enough.

Rarely a clot can form in the leg artery where the catheter is inserted, or the artery can go into spasm. This may affect the circulation in the leg. If this happens it may be necessary to give medicine to thin your child's blood for a short time.

There is a small risk that the catheter used may damage the blood vessel in the neck or that blood circulation to the brain may be affected by the dye used. This could result in neurological symptoms such as problems with movement, sensation or vision. However these complications are rare. The chance of any symptoms like this occurring is around one per cent. If these symptoms do occur, they are temporary in the great majority of people. Your doctors feel that the potential benefits of performing this test is worth this level of risk and you should discuss this with them.

It is extremely rare to have an allergic reaction to the dye. If your child has any allergies, please tell the doctor before the procedure starts. The dye is removed from your child's body by the kidneys and is passed out through normal urination.

Are there any alternatives to angiography?

Your child's doctor may be able to gain information about his or her blood vessels using another type of imaging procedure, such as an MRI or CT scan. Angiography is often just one of many tests and procedures your child will have to help the doctors make a diagnosis and is not usually undertaken unless less invasive tests cannot provide the necessary information.

What happens afterwards?

Your child will return to the ward after he or she has recovered from the anaesthetic. After a general anaesthetic, some children feel sick and may vomit. Your child may have a headache or a sore throat or experience some dizziness, but these side effects are usually short-lived and not severe.

When your child comes back to the ward, the nurses will check the puncture site regularly. Your child's neurological functions will be checked regularly too, by asking your child to move his or her arms and legs and speak, monitoring eye response to light, and pulse, blood pressure and temperature. Your child can start eating and drinking as normal once he or she feels like it. It may be possible for you to take your child away from the ward on the same day as the procedure.

When you get home

You should call the hospital if:

- Your child starts bleeding from where the catheter was inserted; if this happens, apply pressure to the site of bleeding immediately.
- Your child is in a lot of pain and pain relief does not seem to help
- The area where the catheter was inserted looks red, swollen and feels hotter than the surrounding skin
- Your child is not drinking any fluids after the first day back home
- The leg where the catheter was inserted looks or feels different to the other leg

Coming back to hospital

The pictures are analysed by a neuroradiologist who will make a report to your doctors. The results will not be available straight away and usually we will make an outpatient appointment to discuss them.

If you have any questions,
please telephone Koala Ward on 020 7813 8313 or
Interventional Radiology on 020 7405 9200 ext 0491

Notes

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