

# Cerebral Angiography

## Patient information

Your doctor has asked you to have a cerebral angiogram, which is an x-ray test to show the blood vessels supplying the head and neck region. This test allows doctors to see the arteries and veins clearly. *(see figure 1)*

### What happens before an angiogram?

You will be given instructions regarding the time of your appointment and any necessary preparation. Please don't eat for 6 hours prior to your appointment but you may have sips of water. Your usual medication should be taken with a small amount of water. Please notify your provider if you are taking aspirin, heparin, Coumadin, Marevan or Warfarin tablets; also if you have kidney impairment or diabetes, or if you have asthma.

Upon admission you will be allocated a bed and prepared for your procedure, which will be performed in the Radiology department. Your name is placed on a theatre list for your procedure; the earliest time this will be performed is one hour post admission time. This time may vary allowing for complicated procedures and any possible emergencies on the day. You will be changed into a hospital gown. A nurse will shave one or both groins. A tiny needle will be placed into one of your arm veins to allow intravenous medicine to be administered if needed.

### What happens during the angiogram?

You will be taken to the angiography room and asked to lie on an x-ray bed which has the angiographic x-ray equipment over it. If you are anxious, intravenous sedation can be given.

Your groin region will be cleaned with a disinfectant solution then sterile sheets will be placed over your body so as to avoid infections. The radiologist will inject a little local anaesthetic into your groin to numb the skin so you don't feel any pain during the procedure. A fine plastic tube called a catheter is inserted into the artery in the groin region, and then it is steered up to the arteries in your neck. You cannot feel the movement of the catheter as there are no nerves inside the arteries.

You have 4 separate arteries which supply blood to the head and neck (called vertebral arteries) and depending on the nature of your test, you may have to have injections of dye into up to 4 of these arteries. The catheter has to be placed into each of the arteries in turn. The catheter will be steered by the radiologist who is watching its progress on the television screens next to the angiography bed.

When the catheter is positioned correctly, x-ray dye (which is actually clear) will be injected through it. X-ray pictures are taken as the dye travels through the blood vessel. Usually many sets of pictures are taken to fully examine all the blood vessels in the area of interest. Most people report feeling warm as the dye is injected.

### What are the risks?

Cerebral angiography is a very safe procedure as technologically advanced equipment is used. However, all medical procedures carry some risk. In particular, the major risk with cerebral angiography is stroke. There is a 1 in 200 risk of stroke, no matter how carefully the examination is performed. Naturally, all efforts will be taken to ensure this does not happen, but an absolute guarantee can never be given. The procedure also carries other rare risks that include; damage to the artery at the site of insertion, reaction to the x-ray dye or temporary blindness. If you have any concerns your provider will be happy to answer any questions you have.

### What happens after the angiogram?

When the angiogram is completed, the catheter is removed and pressure applied to the site where it was inserted to prevent swelling. You will be moved back onto your bed and a nurse will check your blood pressure, pulse and catheter site frequently. You will be asked to keep your leg still. You will be given food and drinks during this period. You will need to stay in bed for between 4 and 6 hours; after this time you will be allowed to get dressed.

If your test is being performed as a day-procedure, you will need someone to drive you home after the angiogram and it is best if you take it easy for the first day after the test. If you don't live in or near the location your test is being performed, you will need to stay close overnight. If you are unable to stay with family or friends, the receptionists are happy to help arrange other accommodation. Sometime in the week after the test, you may receive a call from your provider to follow up and make sure you're doing okay. If you experience any bleeding or other problems after the test, please contact your provider immediately.

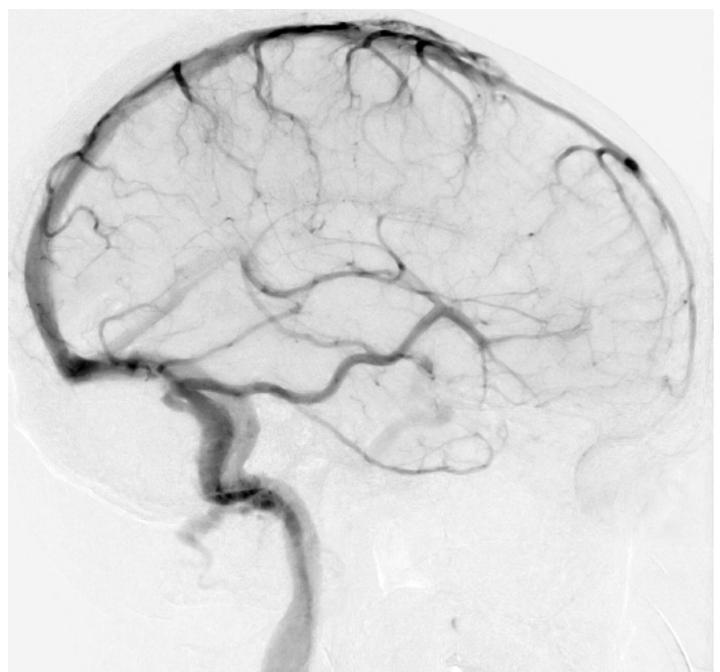


Figure 1; an angiograph of the human brain.