WHAT IS A CEREBRAL ANGIOGRAM?

A Cerebral angiogram is where contrast (dye) is injected into the blood vessels (arteries and veins) of the brain. This outlines them for the x-ray machine to take pictures.

WHAT ARE THE REASONS FOR HAVING AN ANGIOGRAM?

1. To look for abnormalities in the blood vessels e.g. cerebral aneurysms, vascular malformations
2. To look for causes of some neurological illnesses
3. As part of treatment of some conditions e.g. coiling of a cerebral aneurysm. Blocking the blood supply to a tumour or vascular malformation prior to surgery.
4. To find the cause of bleeding in a cerebral hemorrhage.
5. To check that a treatment for some conditions has been successful

WHO PERFORMS THE ANGIOGRAM?

A Radiologist - specialist doctor trained in x-ray techniques

WHAT YOU NEED TO TELL THE DOCTOR

- If you have had a reaction to Contrast (dye)
- If you have kidney disease
- If you are pregnant
- If you have clotting problems
- If you are taking blood thining agents e.g. Warfarin/ aspirin/ anti-inflammatory

HOW IS IT PERFORMED?

The test is performed in an angiography suite with an x-ray machine. You will have fasted for 4 hours before this. A doctor, nurse and a radiographer are usually present. You lie down on the x-ray table. Access to the brain blood vessels is obtained by feeding a fine catheter up from an artery in the groin, behind the heart to the main vessels feeding the brain.

The groin is anaesthetised with local anaesthetic by injection. Then a needle is pushed into the artery to gain access. A long fine catheter is then fed up the artery with the aid of a stiff wire in its middle. Using x-rays and contrast to show the path the catheter is fed up to the main artery to the brain. The contrast is either injected by hand or by a machine. The injection may cause the side effects of nausea, warmth, dizziness or burning. Rarely it will cause irregular heartbeat. All of these things usually pass rapidly.
WHAT ARE THE RISKS?

THE CHANCE OF ANY COMPLICATION IS VERY SMALL

THERE ARE RISKS AT EACH STEP OF THE PROCEDURE

THE COMMON RISKS ARE

Infection as the bloodstream is being entered.

Internal bleeding.

Haematoma or damage to the artery at the site of the puncture.

Irritation to the heart may cause an abnormal heartbeat.

Allergy to the contrast media may cause a rash/swelling/difficulty breathing or heart problems.

In elderly patients or those with atheroma (plaque) in their arteries if a small piece is dislodged by the catheter then a stroke may occur (this is usually transient).

If the catheter needs to be fed up into the brain for a test then there is a risk of the catheter causing the artery to go into spasm or to block off. This may cause a stroke.

YOU WILL BE ASKED TO SIGN A CONSENT FORM TO SAY THAT YOU UNDERSTAND THE RISKS. IF YOU ARE NOT SURE ASK BEFORE YOU SIGN.

WHAT SHOULD YOU DO AFTER?

You will be kept in bed for at least four hours after the test with your leg straight, this is to prevent bleeding at the catheter site. You may be kept overnight.

Your vital signs and catheter site will be regularly checked. It is common to have some bruising around the site but if a lump develops then tell the nurse. If itching or a rash develops this may indicate an allergy to the dye.

Oral pain medication will be prescribed.

Once stable you will then be able to go home. Somebody should drive you home.

You may eat and drink 4 hours after the test.

Avoid activities in the next few days that involve stressing the injection site such as heavy lifting or repetitive bending of the hip joint.

WHAT SHOULD YOU NOTIFY YOUR DOCTOR OF AFTER?

1. INCREASING LUMP IN GROIN
2. SUDDEN DIZZINESS OR CHEST PAINS
3. FEVER
4. SEIZURES
5. WEAKNESS