Interventional Angiography/Angiogram

Your doctor would like you to have an Angiogram and has arranged for you to visit our department. We would like your visit to be as pleasant as possible and hope this leaflet will answer some of the questions you may have. Should you have any questions regarding your appointment please contact us on the appropriate telephone number below:

Eastbourne DGH Appointments:	01323 414917
Conquest Hospital Appointments:	0300 131 4500 ext. 147422

What is Angiography?

Angiography (having an angiogram) is a special x-ray examination of blood vessels. Normally blood vessels do not show up on ordinary x-rays. However, by injecting a special dye called contrast medium into an artery (blood vessel) through a special fine plastic tube called a catheter, and taking x-rays immediately afterwards, detailed images of arteries and veins can be produced.

Why do I need an Angiogram? What are the benefits of having an Angiogram?

Your doctors feel that there may be a problem with part of your circulation. Other tests that you might have had done, such as Doppler ultrasound, can provide useful information, but it is felt in your case the best way of obtaining the amount of detail required is by angiography (angiogram).

Who will be doing the Angiogram?

A specially trained doctor called an interventional radiologist. They have particular expertise in performing procedures under image guidance. There will also be at least one specially trained nurse and a radiographer in the room during the procedure.

Where will the procedure take place?

This procedure will take place in the angiography suite within the x-ray department. This is similar to an operating theatre into which specialised x-ray equipment has been installed.

How do I prepare for an Angiogram?

If you have any allergies you must let your doctor know.

If you have previously reacted to intravenous contrast medium, the dye used for kidney x-rays and CT scanning you must tell your doctor. If you have any doubts then please telephone the radiology department on the above number.

We also need to know if you are on any medicines 'to thin the blood' such as warfarin, heparin, tinzaparin, clopidogrel (Plavix) or phenindrone (Dindevan). If you are please telephone the radiology department nurses on the numbers above well before your appointment so that appropriate advice can be given.

If you are diabetic, particularly if you are taking Metformin, please phone the radiology department nurses well before your appointment so that appropriate advice can be given.

What actually happens during an Angiogram?

You will lie on an x-ray table generally flat on your back. You may need to have a small plastic needle put into a vein in your arm so that the radiologist can give you a sedative or any other medication. Once in place this will not cause any pain. This will be removed on the ward prior to discharge. You may also have a monitoring device attached to your chest and finger and may be given oxygen through small tubes in your nose.

The radiologist will keep everything as sterile as possible, and may wear a theatre gown and operating gloves. The skin near the point of insertion, probably the groin, will be cleaned with antiseptic and then most of your body will be covered with a theatre towel.

The skin and deeper tissues around the artery will be anaesthetised with local anaesthetic and then a needle will be inserted into the artery. Once the radiologist is satisfied that this is correctly positioned, a guide wire is placed through the needle and into the artery. The needle is then withdrawn allowing the fine plastic tube (catheter) to be placed over the wire and into the artery.

The radiologist uses the x-ray equipment to make sure that the catheter and wire are moved into the right position, and then the wire is withdrawn. The special dye (contrast medium) is then injected through the catheter and x-rays are taken.

Once the radiologist is satisfied that the x-ray shows all the information required, the catheter will be removed and the radiologist will then press firmly on the skin entry point for several minutes to prevent any bleeding.

What are the potential risks?

Angiography is a very safe procedure but there are some risks and complications that can arise. There may be an occasional small bruise called a haematoma around the site where the needle was inserted and this is quite normal.

There is a chance that the bruise may become very large and uncomfortable but this does not happen very often. If a large bruise does develop there is a risk of it becoming infected and this would require treatment with antibiotics. In some hospitals a large bruise is treated by having a small operation to drain it. The radiologist performing your angiogram will be able to tell you how often problems with bruises occur at this hospital and how they are treated.

Very rarely some damage can be caused to the artery by the catheter and this may need to be treated by surgery or another radiological procedure.

Despite these possible complications the procedure is normally very safe and is carried out with no significant side effects at all.

Although you will sign a consent form for this treatment, you may at any time after that withdraw such consent. Please discuss this with your medical team.

Will it hurt?

When the local anaesthetic is injected it will sting to start with but this soon wears off and the skin and deeper tissues should then feel numb. After this the procedure should not be painful.

There will be a nurse or another member of clinical staff standing next to you and looking after you. If the procedure becomes uncomfortable for you then they will be able to arrange for you to have some painkillers through the needle in your arm.

As the dye (contrast medium) passes around your body you may get a warm feeling which some people can find a little unpleasant. However, this soon passes off and should not concern you.

How long will it take?

Every patient's situation is different and it is not easy to predict how complex or how straightforward the procedure will be. Some angiograms, for example those looking at the large arteries in the legs, are generally straightforward and do not take very long; perhaps half an hour. Other angiograms looking at smaller vessels may be more complex and can take longer, perhaps over an hour. As a guide expect to be in the x-ray department for about an hour and a half altogether.

What happens afterwards?

You will be looked after by the nurses in the radiology department. Nurses will carry out routine observations, such as taking your pulse and blood pressure to make sure there are no problems. They will also look at the skin entry point to make sure there is no bleeding from it.

What should I do when I go home?

When you get home you should:

- Rest for a minimum of 24 hours and if possible do not go to work on the day after the procedure.
- It is recommended that someone stays with you overnight.
- Continue with your normal medication as prescribed, and pain relief if necessary. If you take anticoagulants, restarting these will be discussed with you before you are discharged.

What do I do if I have a problem at home?

If you have severe pain, swelling or are concerned please go to your nearest emergency department.

Sources of information

British Society of Interventional Radiology

Important information

The information in this leaflet is for guidance purposes only and is not provided to replace professional clinical advice from a qualified practitioner.

Your comments

We are always interested to hear your views about our leaflets. If you have any comments, please contact the Patient Experience Team – Tel: 0300 131 4500 Ext: 135860 or by email at: esh-tr.patientexperience@nhs.net

Hand hygiene

The Trust is committed to maintaining a clean, safe environment. Hand hygiene is very important in controlling infection. Alcohol gel is widely available at the patient bedside for staff

use and at the entrance of each clinical area for visitors to clean their hands before and after entering.

Other formats

If you require any of the Trust leaflets in alternative formats, such as large print or alternative languages, please contact the Equality and Human Rights Department.

Tel: 0300 131 4500 Email: esh-tr.AccessibleInformation@nhs.net

After reading this information are there any questions you would like to ask? Please list below and ask your nurse or doctor.

Reference

The following clinicians have been consulted and agreed this patient information: Dr Mo Faris, Consultant Interventional Radiologist, ESHT Dr Justin Harris, Consultant Interventional Radiologist, ESHT Dr Ben Salt, Consultant Interventional Radiologist, ESHT

The directorate group that have agreed this patient information leaflet: Diagnostics, Anaesthetics and Surgery Division

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