

Patient Information - Arteriograms & Angioplasty

This leaflet tells you about the procedures known as arteriograms and angioplasty. It explains what is involved and the common complications associated with this condition. It is not meant to replace discussion between you and your doctor but as a guide to be used in connection to what is discussed with your doctor.

What is an arteriogram?

An Arteriogram is a special x-ray that enables us to diagnose a blockage or malfunction in the deep blood vessels (arteries) of the body. In order to do the test a long fine tube (catheter) is inserted into the artery at the groin. A special dye (contrast) is injected down the tube and x-ray pictures are taken as the solution passes along the blood vessels. The whole procedure will last approximately one hour.

Before the test

You will normally be admitted to the ward for a few hours beforehand to check out your general health and to prepare you for the arteriogram. On the day of the test you may eat and drink as normal. If you take regular medications please have your usual morning dose. If you are a diabetic on insulin please have your normal food and insulin dose.

On arrival at the hospital you will be seen briefly by the doctor, the test will be explained to you and you will be asked to sign a consent form. This is to ensure you understand the test and its implications.

Please tell the doctor if you have had any allergies or bad reactions to drugs or other tests. It would also be helpful to mention to the doctor if you have asthma, hayfever, diabetes or any heart or kidney problems. If you have any worries or queries at this stage don't be afraid to ask. The staff will want you to be as relaxed as possible for the test and will not mind answering your queries. You will be asked to put on a hospital gown. The test will take place in the x-ray department a nurse will escort you and stay with you during the test.

During the test

The radiologist (x-ray doctor) will inject a local anaesthetic into the skin at the groin "freezing" the area. After this the procedure should be painless. The long fine tube (catheter) is then inserted into the artery at the groin and using x-rays to help the radiologist manipulates the catheter into the correct position. You will not feel the catheter being moved around your body. X-ray pictures are taken whilst the dye is injected down the catheter into the blood vessels. Some injections may cause hot flushing for a few seconds and an occasional feeling of wanting to pass water. When the test is completed the catheter is removed and pressure will be applied to the groin for approximately ten minutes to minimise any bruising

Afterwards

You will be taken back to the ward to rest for a few hours. It is important that you lie quietly so that the groin does not bleed again. The nursing staff will check the groin and foot pulses at regular intervals. Providing all is well you will be allowed home but you need someone with transport to take you home or to accompany you in a taxi. It is important that you rest completely until the next day to ensure that the puncture site in the groin heals up. If after you get home you notice any swelling or bleeding at the puncture site you should press on this and call your GP's surgery for advice.

What are the risks associated with this procedure?

Bruising of the puncture site is not uncommon. False aneurysm (weakening of artery walls) can occur in around 1 in 300 cases. Embolism (blocking of an artery by a blood clot or air bubble)

What is an Angioplasty?

An angioplasty is a procedure where a balloon is passed into your artery on the end of a tube (catheter) and is blown up to treat a narrowed or blocked artery.

As far as you are concerned angioplasty is very similar to an arteriogram except that we use a slightly bigger catheter and therefore the risks of bleeding are slightly greater. For this reason in most cases you will be asked to stay overnight.

You will usually be asked to start taking aspirin before you are admitted as this makes the blood less sticky. A common dose is half a tablet per day (150 mg). If you have an ulcer or are allergic to aspirin please tell your doctor.

What is the procedure?

Angioplasty takes a little longer than simple arteriography and you may feel the doctor changing and pushing catheters in and out of your groin artery. Although this is occasionally a little uncomfortable it will not hurt. Sometimes it will be necessary to insert a special device called a stent to keep the artery open. This is just a small metal cage that expands in your artery to keep the area opened out and allow more blood to flow through.

What are the risks associated with this procedure?

Some degree of bruising is quite common and this normally disappears in a few days. Serious bleeding is very uncommon. Unfortunately in about 10% of cases angioplasty is not successful and other treatments will need to be considered. In addition even where successful angioplasty has been performed there is a risk that the area in the artery will narrow down again. After one year about 20% of arteries will have re-narrowed. In some cases it may be possible to repeat the angioplasty at that time although in others this may not be possible.

Very rarely if angioplasty does not work the circulation may actually worsen. If this is a particular risk in your case your surgeon and /or radiologist will discuss the risks with you.

In about one percent of cases a complication can occur from the angioplasty that might require emergency surgery to correct it.

What happens afterwards?

In some cases Heparin injections (anticoagulation) will be given for 24 hours to prevent the blood clotting at the site of the angioplasty. Rarely you may require warfarin tablets to thin the blood for a few months. You will normally be allowed home the following day.

If you are given heparin or warfarin this may delay your departure by a few days. You will be seen again in the clinic by your surgeon to assess the success of the angioplasty and to decide upon any further treatments.

What are the alternatives to Angioplasty?

Using this technique means that surgery may be avoided in many cases.