

# Coronary Angiogram (Cardiac Catheterisation)

## What is a coronary angiogram?

It is an X-ray that shows the extent of any narrowing of the arteries that supply the heart. It is done under a local anaesthetic and usually takes 30 to 40 minutes.

## Where can it be done?

The procedure is undertaken on the Diagnostic Day Unit at Doncaster Royal Infirmary. However, for those patients whose condition may be unstable, it may be necessary for the test to be done at a hospital that has more specialised equipment, for example at Northern General Hospital, Sheffield.

## How long do I stay in hospital?

You will be in hospital for a minimum of three hours after the procedure, providing that no problems arise.

## What you should do before the test

Before the angiogram, please follow this advice:

- 1 If you are diabetic or taking warfarin tablets, please let us know immediately so that suitable arrangements can be made.
- 2 If your test is planned for the morning, you may have a light breakfast (cereal, toast, fruit juice, tea or coffee). Do not eat anything after 7.00am but you may continue to drink water. If your test is in the afternoon, you may also have a light breakfast do not eat after 10am but you may continue to drink water.
- 3 Take your tablets on the morning of the test.
- 4 Remove nail varnish.
- 5 Ensure that transport is available to take you home. You will need someone to travel home with you and to stay the night.

## How is it done?

A local anaesthetic is injected into your groin.



This may also be done through the arm but it is only for a few selective patients as agreed by your Consultant. This is to numb the area; it may sting a little, but other than that you should feel no pain. A plastic tube is then passed into the artery through the groin or arm and up into the heart. A special liquid called a 'contrast medium' is then injected through the tube. This may cause you to feel hot and flushed, but this sensation lasts for only a few seconds.

When X-rayed, this liquid shows where and if narrowing of the artery is present. At the end of the procedure, the tube is removed from your groin (or arm). The nurse will apply pressure for 10 to 15 minutes to ensure that bleeding stops.

## Return to the Ward

When you return to the ward the recovery period is 3 hours.

1. You must lie flat in bed: your pulse blood pressure and puncture site will be checked every 15 minutes.
2. You will be assisted to sit up on the trolley or bed where you will remain for the next hour. You will be served lunch (sandwich and cold dessert, tea or coffee) during this time.
3. Prior to sitting out for the 3rd hour, you will be asked by the Nurse to check for feeling and sensation in your right leg. (This will have been explained to you earlier and you will have signed to say you understood) You must tell the Nurse if your knee/leg feels numb or you have any difficulty moving your leg. Occasionally the local anaesthetic injected into your groin can cause a temporary numbness to the leg. This is normal and will wear off before you go home. If this occurs you will remain on the trolley or bed until full feeling returns as it is not safe to mobilise.

Two members of staff will help you to stand and transfer to your chair. You will remain sitting for ½ hour DO NOT mobilise until instructed to by the Nurse.

## When can I get back to normal?

Most people get back to their normal lifestyle after a day or two, but this varies from one person to another.

## Are there likely to be any complications?

Serious complications are rare, but investigations carried out on patients, some of whom have serious heart disease, carry risks.



The chances of this procedure causing a stroke or heart attack are 1 in 1000, but the doctor would only recommend an angiogram if s/he felt that the benefits outweighed the risks.

Speak to your consultant or a member of staff about the risks of this procedure. Occasionally patient feel somewhat nauseous following the 'hot flush' feeling, but this usually passes off quickly. Patients with angina may have chest pain during the procedure, but this will settle.

There may be some bleeding, leading to bruising to a large area of the leg; occasionally, this can take several weeks to disappear completely.

The point of entry into the artery may become narrowed in a few patients, but this usually settles of its own accord. Very rarely, an operation may be necessary to correct the narrowing.

## When will I know the results?

You will know the results of the angiogram as soon as the test is complete. The doctor will discuss the findings with you, before you are discharged and what the next steps, if any, should be.

Depending on the results of your tests, the doctor may recommend:

- medication - to control your symptoms
- angioplasty with 'stents' – this is when a tiny balloon is inflated in the narrowing of the artery to stretch and dilate it. When the balloon is deflated, a tiny piece of 'mesh' (the stent) is left in the artery to prevent the narrowing from reoccurring
- Coronary Artery Bypass Grafting (CABG) – in some circumstances the best form of treatment is a bypass operation. The aim of bypass surgery is to enable the blood to get around a narrowed section of the coronary arteries. The surgeon grafts a blood vessel to the main artery from the heart above and below the narrowed or blocked artery (a bypass), so that the blood can again travel freely.

## After your cardiac angiogram

Following a cardiac angiogram, for two days you are advised not to:

- drive any vehicle, operate machinery or undertake work involving danger to yourself or others
- drink alcohol
- take very hot baths (bath water should be luke-warm)
- lift any heavy objects or carry out any strenuous tasks.

It is possible, in some cases, for complications to arise.



You and your carer should read the following advice carefully:

## **Bleeding**

If bleeding occurs from the puncture site or a swollen hard lump appears at the site of the puncture caused by bleeding under the skin, follow the instructions: Lay flat, and apply firm constant pressure with a flat hand directly on the swelling/bleeding point for 10 minutes. This should preferably be carried out by another adult. If bleeding does not stop after 10 minutes, you need to be taken immediately to the nearest Accident & Emergency Department. You should not drive yourself.

## **Bruising**

Some bruising is quite normal following an angiogram and, after insertion into the groin, it can extend as far as the knee. The bruising will gradually fade and disappear. A small number of people will experience excessive bruising, which can be recognised by swollen areas or lumps. If this occurs, you should contact your GP surgery and follow their advice.

## **Poor circulation**

If you experience any of the following in the foot/leg at the same side as the angiogram:

- pins and needles
- change of colour (becomes blue or pale)
- foot or leg becomes colder.

You must go to the nearest Accident & Emergency Department without delay. If you need any advice, please contact the Diagnostic Day Unit on **(01302) 553196**.

Please note the Diagnostic Day Unit is closed on Mondays and is open Tuesday 7am -7pm, Wednesday 7am-3pm, Thursday 7am – 7pm, Friday 7am-3pm. Out of hours, please contact your GP.

## **Patient Advice & Liaison Service (PALS)**

PALS staff are available to offer advice or information on healthcare matters. The office is in the Main Foyer (Gate 4) of Doncaster Royal Infirmary. Contact can be made either in person, by telephone or email. PALS staff can also visit inpatients on all Trust sites.

### **The contact details are:**

**Telephone:** 01302 553140 or 0800 028 8059

**Email:** [pals.dbh@dbh.nhs.uk](mailto:pals.dbh@dbh.nhs.uk)

