

What to expect when having an angiogram

Cardiology Department



Patient information leaflet

What is coronary artery disease?

Coronary artery disease is the narrowing of one or more of the blood vessels that supply your heart with blood. When the blood vessels to your heart narrow it can cause discomfort or pain in the chest. This feeling can radiate to your arms, neck, back and jaw. Some people also describe feeling short of breath or are unable to catch their breath.

What is a coronary angiogram?

A coronary angiogram is an investigation carried out to have a look at the blood vessels that supply the heart with blood. Under local anaesthetic a small incision is made in the artery at the top of the leg (femoral) or in the artery in the wrist (radial). A thin flexible tube called a catheter, is then passed through the artery to the heart. When the catheter reaches the heart an injection of a contrast dye is then injected into the coronary arteries. Simultaneously a camera will be taking images from different angles to build up a comprehensive picture and understanding of your hearts blood vessels. It is possible to tell from these pictures whether there is any narrowing of the coronary arteries. In some cases it might be necessary to take a picture of the function of the heart this is called a left ventriculogram. This is achieved by injecting the contrast dye in to the left ventricular cavity (LV). This is also recorded by the camera and indicates how well the heart muscle is functioning.

What should I expect to feel during the procedure?

You may feel a bee sting like sensation as the local anaesthetic is administered to the groin or wrist but generally the angiogram is well tolerated. Please inform the team at any point if you feel any discomfort so that they can try to alleviate it. During the left ventriculogram it is common to feel a hot flushing feeling and sometimes the sensation of losing control of your bladder. You will not have lost control of your bladder; this sensation is a common reaction to the large and more powerful injection of the contrast dye used. Prior warning will be given.

Prior to procedure

If you have not already been screened for MRSA, you must attend the Medical Day Unit on Level A at least four days prior to your procedure. You do not need to book an appointment as this is a walk-in service which is open from 1pm-4pm Monday to Friday. Please be aware that there might be a slight delay depending on the demand.

What shall I do on the day of the procedure?

You should have a light early breakfast of toast or a bowl of cereal and a cup of tea before 6:00 am on the morning of your procedure. Please take all your normal medications except the medications listed on the appointment letter. After taking your medications please do NOT forget to bring them ALL with you so that nursing staff can record anything that you may be taking.

On the day of your procedure you will arrive at the Cardiac Day Ward (CDW) at the time advised on your letter. A cardiac nurse will be there to greet you and check you in. This includes general observations, inserting a cannula in to a vein in your arm (in case we need to give you any medication during the procedure) and completion of a questionnaire checklist. The doctor will then discuss the procedure benefits and risks with you, before gaining your consent to proceed.

Are there any risks associated with the procedure?

Angiography is a safe test but all procedures carry a certain amounts of risks. Statistics show that 1-2 people out of every 1000 who have the procedure are at risk of having a serious complication such as a heart attack, stroke or death during the procedure.

A minor complication which may occur is a haematoma (a small collection of blood at the top of the leg caused by a leak in the femoral artery). This will be resolved following the procedure by the nurse and may leave you with a bruise. Bleeding and bruising is a common occurrence around the procedure site. This is quite normal but if you notice a hard uncomfortable lump developing after the procedure or bleeding 24 hours after the procedure seek medical help.

Are there any alternatives to this procedure?

CT angiography can be offered as an alternative to coronary angiography. However, coronary angiography is thought to be the 'gold standard' and provides the doctors with the most information regarding your coronary anatomy..

What should I expect following the procedure?

Once the procedure has finished the tube will be removed from the procedure site and one of the following steps will be undertaken depending on if you had the procedure femoral or radial.

What can I expect post procedure following femoral access?

Manual pressure will be applied; this involves a nurse or doctor applying firm pressure to the top of the leg just above your groin for approximately 10 minutes. This is to enable the small hole that we made in the artery to heal. If manual pressure is applied you will have to observe a total of three hours bed rest, one hour of which will be lying flat and a further two hours sitting up in bed.

Occasionally where safe a small collagen plug is inserted into the artery and this enables you to sit up immediately and mobilise within two hours if no complications such as bleeding occur. There are many different types of seals which are used and if you receive one it will be explained to you on the day.

Once the bleeding has stopped the nurses will continue to take your blood pressure, pulse, observation of the puncture site and monitoring of the pulses in your feet during the three hours of your recovery.

You will stay for recovery for between two to three hours, this is dependent on the manner in which your puncture site was closed.

What can I expect post procedure following radial access?

If the procedure was carried out through the radial artery in your arm a device called a TR band will be used to put pressure on the radial artery, this is a watch like device with an air filled pillow which sits just above the site.

The TR band will be put in place in the cardiac catheter lab and once no bleeding has been observed you will be transferred back to the day ward where the nurses will observe your blood pressure, heart rate and puncture site regularly.

The TR band will stay inflated for one hour following the procedure, after an hour the nurse will start removing a small amount of air every five minutes until the band is totally deflated and the puncture site is healed. This may take up to an hour to completely deflate, once down the site will be observed before you will be discharged.

What do I need to know before I go home?

Before you go home you will be advised as to the results of your angiogram, this may affect:

- Driving (NO driving for the first 24 hours, unless otherwise stated)
- Remove the dressing after 24 hours
- Quite extensive bruising is normal
- Medication (Please continue with medication as before, any changes will be discussed prior to discharge)
- Vigorous activity (For 24 hours)
- No heavy lifting (Femoral for 48 hours, Radial 72 hours)
- Work
- Lifestyle
- Flying
- Further appointments
- Dietary changes
- Consult your GP if the wound site where the procedure was undertaken becomes more than a mild discomfort

Further reading

Arrhythmia Alliance

- 01789 450787
- info@heartrhythmcharity.org.uk

British Heart Foundation

www.bhf.org.uk

Reference sources

www.nhs.uk/Conditions/Coronary-heart-disease

Contact details

Cardiology Department

Royal Surrey County Hospital NHS Foundation Trust
Egerton Road, Guildford, Surrey, GU2 7XX

Pacemaker Department

Telephone: 01483 571122 **ext** 4686

Cardiac Day Ward

Telephone: 01483 571122 **ext** 6326

Coronary Care Unit

Telephone: 01483 571122 **ext** 4016

PALS and Advocacy contact details

Contact details of independent advocacy services can be provided by our Patient Advice and Liaison Service (PALS) who are located on the right hand side as you enter the main reception area. PALS are also your first point of contact for health related issues, questions or concerns surrounding RSCH patient services.

Telephone: 01483 402757

Email: rsc-tr.pals@nhs.net

Opening hours: 9.00am–3.00pm, Monday to Friday

If you would like information documents in large print, on tape or in another language or form please contact PALS.

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