

Coronary Angiogram

Patient information leaflet

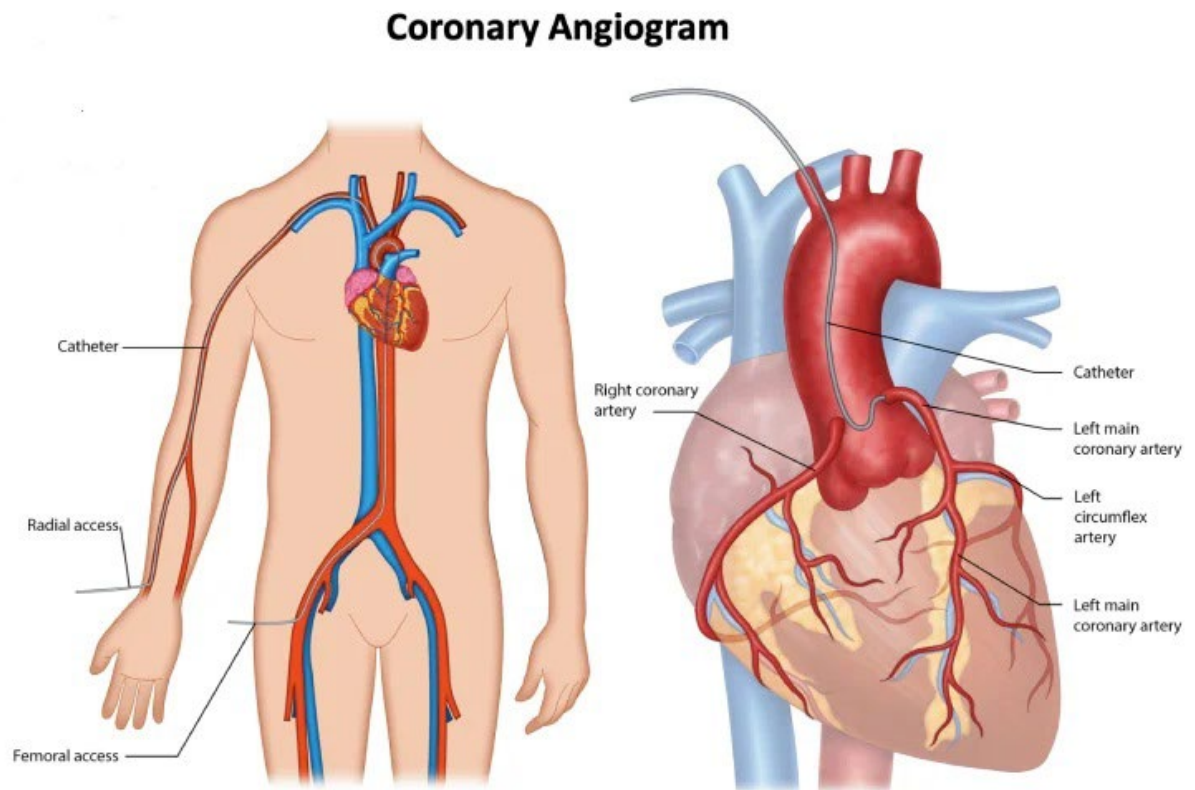
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What is a coronary angiogram?



A coronary angiogram is a test to look at the main blood vessels supplying blood and oxygen to your heart, known as the coronary arteries. This test helps your doctor identify any problems with your heart and locate any narrowed areas in the coronary arteries, along with their severity.

During the procedure, a thin tube called a sheath will be inserted into an artery in your wrist (occasionally in the groin) under local anaesthesia. Through this sheath, a longer, fine tube called a catheter will be carefully advanced to the heart under X-ray guidance. Once the catheter is in place, a special colourless liquid known as “contrast medium” will be injected through it, making your coronary arteries visible on the X-ray. This allows your doctor to identify any blockages or narrowings in your heart's blood vessels and determine the best course of treatment.

Benefits of a coronary angiogram

The aim of the procedure is to find out if there is a narrowing or blockage in your coronary arteries or any abnormalities in the chambers or valves of your heart.

This information will help the cardiology team to plan and discuss potential treatments with you. This may include options such as coronary angioplasty (widening a narrowing with a stent or balloon) or heart surgery.

Sometimes, the procedure may reveal that no further treatment is necessary or that managing your condition with medication is the best option. Your cardiologist will discuss these findings and recommendations with you.

Risks of a coronary angiogram

All medical procedures carry some risk. An angiogram is a relatively safe test. Less than 1 in 1,000 people (less than 0.1%) have a serious complication as a result of having a coronary angiogram.

Bleeding

Bleeding from the needle puncture site can occur. This bleeding will usually stop on its own. Occasionally, the bleeding is more severe, and a blood transfusion and/or a small operation to seal off the artery is needed.

Bruising

A small amount of bruising in the wrist/groin is quite common but will disappear over a couple of weeks.

Infection

This is very rare, but there is a tiny risk of infection at the puncture site.

Reaction to local anaesthetic or contrast fluid

There is a small risk of a reaction to the drug or contrast fluid used. This usually consists of an itchy skin rash which resolves within an hour or two, but rarely can be more severe.

Changes in heart rhythm

There is a small risk of developing an abnormal heart rhythm during the procedure. Most of these are harmless and settle on their own within a few seconds. Occasionally, it is necessary for us to give a drug by injection or an electric shock to correct a persistent change in the heart rhythm.

Heart attack or stroke

Rarely a heart attack or stroke can occur during the test. If this does happen, it is often minor. Rarely, a heart attack can be more serious and may lead to the need for an emergency heart operation. A heart attack or stroke can also be so severe that it can cause death or leave a serious disability.

Reduced kidney function

There is a small risk that the contrast fluid used in the test could reduce kidney function. Rarely, the kidneys may be damaged permanently. This risk is higher if kidney function is abnormal before the test.

Alternative tests

A coronary angiogram is the most effective way to determine the exact location and severity of narrowed areas in the coronary arteries. This procedure is essential if surgical or catheter-based treatment for coronary artery disease is being considered.

For some patients, a CT angiogram can be a non-invasive alternative to gather information about narrowed heart arteries. However, this test is not suitable for everyone so that a decision will be made based on your medical history.

Other diagnostic tests, such as a perfusion scan, MRI (magnetic resonance imaging) scan, or exercise test, can identify the presence of coronary artery disease but cannot provide detailed information about the location and severity of the narrowing.

Instructions for eating and drinking

On the morning of your test, you may drink as usual and can have a light early breakfast (7 am) and then have nothing to eat until after the test.

What to bring to the hospital

Remember to bring:

- all your usual medication
- a dressing gown
- slippers that fit well and have a good grip
- something to read or to do before and after your test

Many people find it helpful to have someone with them. You may bring your partner or spouse or a close family member or friend with you, although they cannot stay with you or go into the angiography suite.

Medications

Your usual medicines

We will usually ask you to continue with your usual medication (except as instructed below), so please bring it with you.

Warfarin

If you are taking warfarin, you may be asked to stop it before the test, although sometimes the test can be performed through the artery in your wrist without stopping the medication.

Your cardiologist will inform you whether you need to stop warfarin. If you are advised to stop and do not have an artificial heart valve, please discontinue warfarin three days before the test.

For patients with an artificial heart valve, it is essential to discuss this with your cardiologist or contact the cardiac catheter laboratory or your cardiologist's secretary on 01432 364071 to arrange special preparations. If you need to stop warfarin, you may require heparin injections for several days before and after the procedure.

DOAC - Dabigatran, Rivaroxaban, Apixaban, Edoxaban

If you take DOAC (Dabigatran, Rivaroxaban, Apixaban, or Edoxaban), it may be possible to conduct the test through the wrist artery without stopping the medication. However, if you have been instructed to stop, take your last dose on the morning of the day before your hospital appointment.

Diabetes treated with tablets

If you have diabetes and are treated with metformin, avoid taking it on the day of your test and the following day. You can resume your regular dose 48 hours (two days) after the procedure. Other diabetic tablets can be taken as usual. To accommodate this, your test is typically scheduled early in the morning, allowing you to eat soon afterwards.

Diabetes treated with insulin

For patients with diabetes treated with insulin, do not take your usual dose on the morning of your test. Nurses will monitor your blood sugar levels regularly during your visit. After the test, you will be provided with a sandwich, so please bring your insulin with you to take your regular dose at that time.

Please contact the Cardiology Secretaries at 01432 364071 if you are unsure if you need to stop any of your medications before the test.

What happens during your angiogram?

Your angiogram will take place in the Angiography Suite and usually lasts about 30 minutes to one hour. A cardiac catheterisation is performed using a specialised X-ray machine in the cardiac catheter suite. We will ask you to lie on a couch within the ring of the X-ray machine. If you feel anxious, a sedative can be provided to help calm you.

A local anaesthetic will be injected into your wrist (or groin) to numb the skin. A small cut will then be made to insert a sheath into the artery. Through this sheath, a longer, fine tube called a catheter will be carefully advanced to the heart under X-ray guidance. The doctor will monitor the catheter's progress on a TV screen using a low-dose X-ray technique called fluoroscopy.

When the catheter reaches your heart, a special colourless liquid known as “contrast medium” will be injected into your arteries. This contrast medium helps to identify any narrowed areas or blockages in your arteries on the X-ray. You may experience a hot flushing sensation for a few seconds when the contrast medium is injected. Some patients may notice occasional missed or extra heartbeats, but you should not feel any pain. If you do experience new pain or symptoms such as shortness of breath, inform the doctor or nurse immediately.

After the procedure, the catheter will be removed, leaving a small wound at the insertion site. If the angiogram was performed through your wrist, the doctor may use a special band called a “Helix band” to stop the bleeding. For angiograms performed through the groin, Manual pressure or a small collagen plug called an angioseal may be used to stop bleeding.

The doctor will explain the results of your angiogram and discuss any recommendations for your treatment before you leave the hospital. A detailed report will also be sent to your GP for follow-up care.

Leaving hospital

Length of stay

Most patients undergoing this test will remain in the hospital for most of the day but typically do not need to stay overnight.

Convalescence

Most people feel well after the procedure, though some may experience a slight bruised sensation at the site where the tube was inserted. You can take a simple painkiller, such as paracetamol if needed. It is recommended that you are not alone at home on the night after your procedure.

Puncture Site

A small waterproof or gauze dressing will be placed over the puncture site after the test and can be removed after 24 hours. Some mild bruising or aching is normal, but if you notice redness, swelling, pain, or widespread bruising, contact your GP or the Cardiac Catheter Suite at Hereford County Hospital ((01432) 355444 Ext: 5633) for advice.

Exercise

Avoid strenuous exercise for two days following the procedure. Refrain from heavy lifting or carrying heavy shopping. Light activities, such as walking around your home, garden, or workplace, should not be a problem.

Driving

You will not be able to drive for 24 hours after your angiogram. Please arrange for someone to take you home from the hospital.

Work

Your return to work will depend on the nature of your job. If your work involves heavy manual labour, you may need to take a few days off. For jobs that do not involve lifting or physical exertion, you may be able to return to work 1-2 days after the procedure.



Useful contacts

The County Hospital (01432) 355444	Angiography Suite (01432) 355444 Ext: 5633	Cardiology Secretaries (01432) 364071
Heart & Lung Department 364109	Coronary Care Unit (01432) 372996	Lugg Ward (01432) (01432) 364118

Your experience matters

We aim to provide the care that we would want for ourselves, our families and friends. If you think something could have been done differently, please speak to the department or ward staff. You can contact them by calling the hospital switchboard and asking for the relevant department. Further information about our services is available on our website:

- **Phone (hospital switchboard):** 01432 355444
- [Wye Valley NHS Trust website](#)

This leaflet is available in alternative formats. If you need this please contact the Patient Experience Team using the telephone number or email below.

After using our services we may ask for your opinion about your experience. Your feedback helps us to make things better for all our patients.

You can also contact the Patient Experience Team by:

- **Phone:** 01432 372986 (please leave an answerphone message)
- **Email:** PALS@wvt.nhs.uk