

Having an angiogram and catheter test of your heart (coronary angiography)

Department of Cardiology

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Information for Patients

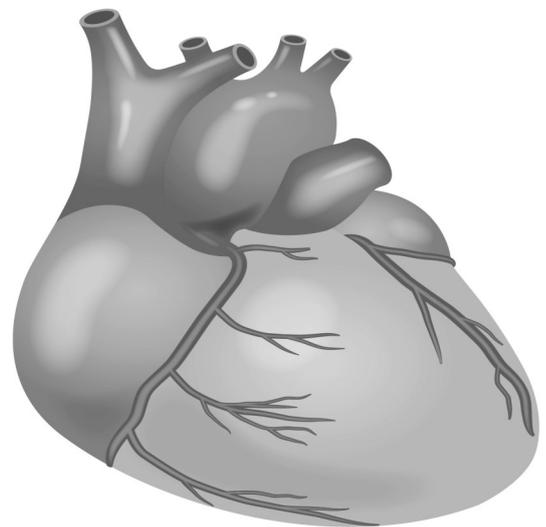
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Introduction

This booklet has been developed to help you understand what to expect before, during and after your coronary angiography. If you have any questions that the booklet does not answer, please do not hesitate to ask the nursing or medical staff who are looking after you.

Coronary artery disease

Coronary artery disease is the term used to describe furring and narrowing of the arteries (blood vessels) in the heart that provide blood flow to the heart muscle. The gradual build up of fatty materials in the inner lining of the arteries is the most common cause of narrowing of the coronary arteries. **Angina** is the name given to the feelings, or symptoms, that happen when the build up is enough to restrict the blood flow down the artery, and the heart muscle does not receive enough blood and oxygen. These symptoms may include chest pain or discomfort as well as breathlessness.



The heart and its coronary arteries

**Health information and support is available at www.nhs.uk
or call 111 for non-emergency medical advice**

Visit www.leicestershospitals.nhs.uk for maps and information about visiting Leicester's Hospitals
To give feedback about this information sheet, contact InformationForPatients@uhl-tr.nhs.uk

What is a catheter test?

Cardiac catheterisation and angiogram are tests that help us to understand more about your heart condition. You will need a short stay in hospital to have these tests carried out.

A catheter test involves passing one or two fine tubes called catheters into blood vessels. This is through a puncture hole in either the arm or the top of the leg. We use x-rays to check the position of these fine tubes as they are passed round to the heart.

The catheters measure pressures inside the heart, and are used to inject 'dyes' that enable x-ray pictures to be taken of the heart and coronary arteries. As this test uses x-ray screening it is important that you tell us before you come into hospital if there is a chance you may be pregnant.

Pre-admission

Many patients are seen in a pre-admission clinic before being admitted to hospital for their procedure. If you are on Warfarin or have diabetes, the doctor and nursing staff will talk to you about what tablets and insulin you may need to stop or reduce before coming into hospital. You will have an ECG (heart tracing), blood tests and MRSA (Methicillin Resistant Staphylococcus Aureus) swabs taken to check for bacteria. You will be given an anti bacterial nasal ointment and a daily body/hair wash treatment to start using two days before you come in for your procedure.

Pre-admission may happen on the day you have been informed that you have been listed for the procedure, or it may be a separate appointment.

If you do not receive a pre-admission appointment, it is very important that you ring the pre-admission admin team on 0116 250 2598 or 0116 258 3903.

Remember to bring all your usual medication with you to your pre-admission clinic and on the day of your procedure.

How do I need to prepare myself?

We ask that you have a shower or bath on the morning of the procedure.

We encourage you to eat and drink as normal right up until the procedure (no fasting is needed).

Please take all your morning medication as usual, unless you have been told not to.

If you have diabetes - please stop taking any Metformin (or Sukkarto) two days **before** the procedure.

A gown and pants will be provided for you to wear during your procedure. We don't usually give sedative medicine beforehand, but if you are very anxious, this can be arranged in the Catheter Labs. Please feel free to ask about this at any time whilst in the lab.

Please bring an overnight bag with a dressing gown and slippers.

On the ward - what does the test involve?

You will be admitted onto a Cardiology Ward and told what time to expect your procedure. When you arrive on the ward you will meet the nurse who will be caring for you and they will assist you in preparing for the test.

If you are well after the procedure we will talk to you about when you can go home (be discharged). This could be the same day or we might ask you to stay in hospital overnight.

A small plastic tube (called a venflon or cannula) will be placed in the back of your hand or arm. This is so that medication and fluids can be given to you during the procedure if needed.

We will clip any body hair from the angiogram puncture site, the wrist and groin. **Please do not shave this area before you come to hospital.**

The catheter test

The catheter test is performed in an investigation room (which contains special x-ray and monitoring equipment) and this is away from the ward. You may be asked to walk to the investigation room.

A nurse from the investigation room will come and introduce themselves and take you to the room. The staff in the investigation room will be wearing gowns, masks and hats, as this is a clean procedure.

You will be transferred on to an x-ray table, which is narrow and rather hard. Heart monitor wires will be attached to your arms and legs. Either your groin or arm will be cleaned with an antiseptic lotion and sterile towels will be used to cover the surrounding area. A local anaesthetic will be injected to numb your skin so you will not experience pain when the tube is passed into your blood vessel. Once the catheter has been put in the blood vessel in your arm or groin, you should not feel them as they are passed up to your heart. Occasionally you may feel a few extra heart beats (palpitations) but this is perfectly normal.

The x-ray equipment will be positioned close to your chest, but will not cause you any harm. Most catheter studies involve an injection of an x-ray dye through the tube into the main compartment and arteries of the heart. During this injection it is usual for you to experience a sudden flushing feeling, which lasts up to thirty seconds; you may also feel like you have had a wee (passed water) but you will not have done. You will also hear the cinecamera we use to take pictures of the x-rays. The test takes about half an hour, sometimes less. When the catheters are taken out pressure will be applied on your groin/arm for about fifteen minutes to allow the blood vessel to seal; you will not need any stitches.

What happens afterwards?

After the test is finished you will be transferred back to the ward.

If your procedure has been performed in your groin you will need to rest in bed lying flat for 30 minutes, we will then help you to sit up for 1½ hours. Please keep your leg as straight as possible to minimise the amount of bruising you may get.

If your procedure has been performed in your wrist you will stay in bed or a chair for 30 minutes to 1 hour. Once back on the ward you will be able to eat and drink, your nurse will confirm this at the time. The nurse caring for you will check your pulse. The nurse will feel your pulse in either your feet or wrist (depending on where the test was carried out from), and check your blood pressure.

You will normally be able to go home on the same day, however occasionally patients stay in overnight. You will be informed of the initial results of the test before you go home. A follow-up appointment is not always necessary. If we do need to see you again, we will send you a letter.

Benefits of the procedure

These tests can tell us about the state of your coronary arteries, the heart valves and the pumping chambers of the heart. They are an essential part of planning for possible heart surgery or other cardiac procedures.

If you have specific worries, please discuss them with your consultant, GP or nurse responsible for looking after you.

Risks

No test which involves putting tubes into blood vessels of the heart is totally free of risk. The risks are higher if you are very unwell or older (over 70 years). Risks include:

- About 1 in every 1000 people (0.1% chance) might have a heart attack (myocardial infarction), stroke or serious heart rhythm disturbance, any of which might lead to death (about 1 in 10,000).
- Emergency cardiac surgery may be needed during or soon after the procedure if a serious problem is found or develops.
- There is a very small risk of clotting in the leg veins (thrombosis) with clots passing to the lungs (embolism).
- Minor groin complications of bleeding and bruising are common (about 1 in 5 people or 20%) with more serious damage to the artery or veins in about 1 in every 100 cases.
- The procedure is associated with an approximate risk of 1 in 8,000 of inducing a fatal cancer due to the use of x-rays. This will vary depending on the complexity of the procedure. The amount of radiation that you will be exposed to is the equivalent of the background radiation you are exposed to through living in Leicester in 1 year (assuming background radiation of 2.6mSv per year).
- Depending on the complexity of the exam there is a small chance of radiation induced erythema (skin reddening); if you are at increased risk of this you will be informed after the procedure is completed.

Going home from hospital (discharge)

If your catheter test was from the groin, avoid heavy lifting and fast walking for two to three days after leaving hospital. You will have a plaster in place, which can be removed after two days.

You will not be able to drive after the procedure. You will need to arrange for someone to collect you from hospital.

The Driving and Vehicle Licencing Agency (DVLA) state that you should not drive a car for two days from the date of the procedure (no notification to DVLA is required). A bus or lorry driver must tell the DVLA about the procedure, and must not drive the bus or lorry until they have had permission from the DVLA.

You must have someone with you overnight on the day of your discharge, and you must have access to a telephone.

You should take it easy for at least two days and slowly increase your activity. Ask your doctor or nurse about returning to work as this often depends on your job, but we often suggest that you have one week off work. Avoid lifting heavy objects and activities such as vacuuming, mowing and lifting heavy shopping for two days and then return to normal activity.

You can have a warm shower 24 hours after your procedure. Don't have a hot bath as this may cause the artery to swell and cause bleeding.

Follow-up

A follow-up appointment is not always needed. If we do need to see you again in outpatients, we will write this in your discharge letter.

Problems at home

There is a very small risk that the wound in your wrist or groin may start bleeding. If your groin bleeds, don't panic but lie down on the floor (not the bed), where you are less likely to faint. Use the flat of the fingers of both hands, or a clenched fist to press over the groin wound for thirty minutes and then slowly release. Ask someone else to do this for you if possible.

If your wrist is bleeding, apply firm pressure just above the wrist pulse.

Do not use a tourniquet for either wrist or groin, as it will not work and is dangerous. You should contact your GP so that they can check your wound and to see that you are all right. If the bleeding has not stopped after 30 minutes dial 999 for assistance.

You may have a painful bruise over the puncture wound in your groin. This is due to bleeding under the skin. If a painful lump does develop, especially if the groin becomes painful when walking, please seek medical advice. Bruising and colour changes to the skin above and below the groin or wrist may develop over the week. Take paracetamol to help with any discomfort.

If there is any doubt or problem with your groin or wrist, within the first week of returning home, you should contact your GP.

Contact details

Ward 28 0116 258 3646

Ward 32 0116 258 3313

Ward 33 0116 258 3733

Pre-Admission Nursing Team (Clinic D) 0116 250 2473 (Monday to Friday, 9am to 5pm).

Cardiac Rehabilitation Helplines

Glenfield Hospital 0116 258 3986

Leicester General Hospital 0116 258 8069

Derby Royal 0133 225 8137

Kings Mill 0162 367 2296

Lincoln County 0152 257 3945

Pilgrim 0120 544 6282

Queen's Burton 0128 359 3150

Kettering 0153 649 1102

Bourne Health Care 0177 8425124

George Elliot 0247 635 1351

Further information

www.activateyourheart.org.uk is an interactive website for heart patients and their relatives, offering heart and health related information.

The British Heart Foundation has up to date information on heart disease www.bhf.org.uk. They also have booklets and DVD's, with videos of procedures on line. It has a helpline number 0300 330 3311.

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔
على هذه المعلومات بلغة أخرى، الرجاء الاتصال على رقم الهاتف الذي يظهر في الأسفل

જો તમને અન્ય ભાષામાં આ માહિતી જોઈતી હોય, તો નીચે આપેલ નંબર પર કૃપા કરી ટેલિફોન કરો

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੁੰਦੇ ਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਹੇਠਾਂ ਦਿੱਤੇ ਗਏ ਨੰਬਰ 'ਤੇ ਟੈਲੀਫੋਨ ਕਰੋ।

Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

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