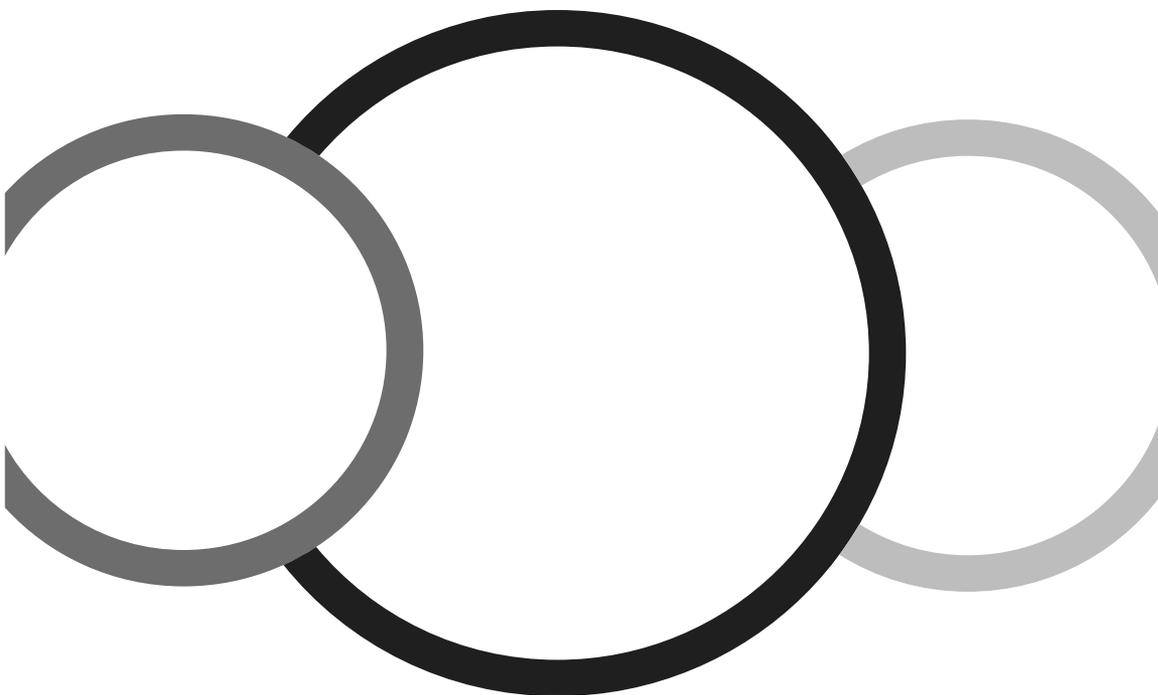


Patient information

Cardiac angiogram/angioplasty



Having an angiogram or angioplasty

You have been referred to The Essex Cardiothoracic Centre (CTC) for a procedure called a cardiac angiogram. You may also need an angioplasty. This leaflet explains both procedures, so that you know what to expect.

What is a cardiac angiogram?

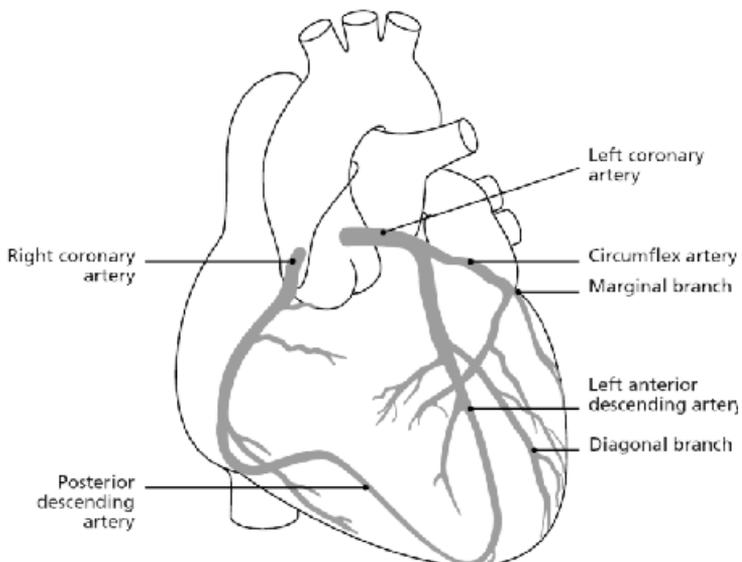
A cardiac angiogram is a type of x-ray using a special dye (called 'contrast'), which shows if the arteries (the vessels that supply blood to the heart muscle) are narrowed or blocked.

What is a cardiac angioplasty?

If during the cardiac angiogram, one or more of your coronary arteries are found to be narrowed or blocked, an angioplasty may be carried out to treat this. This treatment is done using a small balloon to stretch open a narrowed or blocked artery, and can involve inserting a small mesh tube that stays in place to keep the artery open.

Both procedures are performed under local anaesthetic and mild sedation can be given. This will not put you to sleep, so you will be awake and be able to talk throughout the procedure.

Coronary Artery Disease



What you need to arrange before you come in

- You will need to arrange for somebody to bring you to the hospital and collect you by car or taxi. You will not be able to drive yourself. You will not be able to travel by public transport for 48 hours following your procedure.
- Unless you need someone to interpret or assist with special needs, we ask that relatives or friends wait outside Thames ward in the waiting area. They can also use the main hospital canteen or the coffee shop on level A at the entrance to the CTC. Unfortunately there is no space for visitors on Thames ward.
- If you go home the same day as your procedure you will need to make sure someone stays with you overnight.

If you need ambulance transport because of your medical condition and are being admitted to The Essex Cardiothoracic Centre, please contact the CTC Patient Activity Office on 01268 524900 ext 4191/4192/4092 for advice.

For patients attending the cardiothoracic centre for their procedure who do not live in the local area, there is a possibility of subsidised hotel accommodation. Please contact the CTC Patient Activity Office on 01268 524900 ext 4191/4192/4029 for advice.

On the day

Please remember to bring with you:

- All your medication in their original boxes and in the green medication bag
- Overnight bag with your preferred nightwear, dressing gown, slippers and toiletries
- Something to read or a personal music player with headphones
- Shower prior to your admission and shave the hair on the inside of your wrists and the crease in your groin (approx. 5cm diameter).
- You should have a light early breakfast (small bowl of cereal or slice of toast) before 6am on the morning of your procedure but you must not

eat after that. You can drink fluids freely.

- For security reasons, please do not bring anything that is valuable to you into hospital. The hospital regrets that it cannot accept responsibility for loss or damage to property belonging to patients.
- Please do not wear jewellery, makeup or nail varnish. Your wedding ring may be left on if you wish and we will cover it with tape.

Should I take my normal medications?

Unless advised otherwise at your preadmission assessment, you should take all your usual medication with water.

You may be taking medications that need to be withheld prior to your procedure, if so this would have been discussed and explained to you by the pharmacy technician, nurse or doctor during your preadmission assessment. In particular you may need to stop taking or adjust your doses of:

- Anticoagulation medicines (including Warfarin and the newer oral anticoagulants for example Apixaban and Rivaroxaban).
- Metformin and other medicines for diabetes, including insulin.

You can use the box below to write down medications you need to stop or adjust prior to your procedure.

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What happens when I arrive at hospital?

You will be admitted to the ward by a nurse and shown to your bed or chair.

Please tell the nurse if you have had any allergic reactions in the past or if you think you might be pregnant. You will be asked to remove some of your clothing and may be asked to put on a hospital gown.

The nurse will take your blood pressure, heart rate, and temperature and oxygen level. A small tube (cannula) will also be inserted into a vein in your arm, so you can be given sedation and other drugs intravenously. We will also take a blood sample to confirm your blood group prior to the procedure.

The consultant or doctor will come to see you. They will explain the procedure and any side effects or possible complications for you. They will ask you to sign a consent form. If there is anything you do not understand or if you have any questions, please ask.

What happens during an angiogram?

You will be taken to the cardiac catheter lab for your procedure. There will be a team

of people present including your consultant, a doctor, nurses, cardiac physiologist and a radiographer who all have individual roles and responsibilities during your procedure. You will be asked to lie flat on the table and it is important to stay still. You will be attached to the monitoring equipment to measure your blood pressure and heart rate. If you feel anxious before and during the procedure, sedation can be given to help you relax. If at any time you want to ask a question please do so.

- You will be given local anaesthetic in either your wrist or groin. Once the area is numb, a small incision will be made and a short tube (sheath) will be placed in the artery to keep it open. A thin flexible tube (catheter) will be passed into the artery via your wrist or groin.
- The catheter will be moved, under x-ray guidance, until it reaches the correct position in your coronary arteries. Fluid (contrast dye) is then injected through the catheter. This can be seen on the screen.
- X-rays are taken as the dye passes through your arteries,

outlining the blood supply to your heart. Some people experience a hot flushing sensation from the contrast, which will last for a few seconds only. You will be told when this will happen.

What happens during the angioplasty?

This will involve the same process as an angiogram but for an angioplasty the catheter has a small deflated balloon at the end and is passed through the narrowing or blockage in the artery.

Once the catheter is in the narrowing the balloon is inflated to open up the artery. A stent may also be inserted and this will remain in place once the balloon is removed. The stent is a small tube of stainless steel mesh. The stent cannot be removed and will eventually become covered by the lining of the artery.

Will I feel any pain?

The procedure is not painful, but you may feel some discomfort or chest pain. If you feel any chest pain or feel unwell, please let the team know straight away.

What happens after the procedure?

If there are no complications you may be able to go home the same day without needing to stay in hospital overnight.

If the catheter was inserted via your arm, a small pressurised cuff will be placed around your wrist to stop any bleeding. The pressure will be decreased gradually by the nurse over a period of several hours. The nurse will monitor the site where the catheter was inserted. You should be able to sit up straight away but should remain in your chair or bed for a few hours. If you feel any discomfort or pins and needles in your hand or fingers please tell the nurse.

If the procedure was done via your groin:

- The sheath will be removed at a specific time after the procedure. The nurse or doctor will apply pressure to the groin area for up to 20 minutes. This procedure will be explained to you.
- A closure device called an angioseal will be inserted into the artery once the sheath has been removed. This will seal the wound. If you have

an angioseal you will be given a patient information card which you should carry with you for 90 days. It takes 90 days for the angioseal to dissolve. If another procedure is required in this time, let the medical staff know and show them the information card.

- If you have had lots of blood thinning medication the sheath may be left in for 1 – 3 hours after the procedure. You will need to lay flat for approximately one hour after the sheath has been removed to ensure there is no bleeding from the puncture site. The whole procedure for removing the sheath will be explained to you. The nurse will also tell you when you are able to sit up and when you can begin mobilizing.
- It can be difficult to eat and drink whilst you are lying flat, but the nursing staff will help you as it is important to drink plenty of fluids after the procedure.
- Some patients prefer not to eat when they are lying flat but once you are sitting up you can eat as normal.

- Before you go home you will be told about any changes to your medication and how to care for your wound. You will be advised when to restart any medication that was withheld. .

If you had an angioplasty, you will be seen by a CTC cardiac rehabilitation nurse before you go home. They will discuss your condition and your recovery with you. This is known as phase I rehabilitation. They will pass your details onto the cardiac rehabilitation centre near where you live. You will be given a cardiac rehabilitation information leaflet which will include details about where to contact when you are discharged. The rehabilitation program will help you with exercises and give a variety of lifestyle and diet talks to help you recover.

For patients who have experienced a heart attack and/ or had a coronary stent inserted, attending and completing a course of exercise-based cardiac rehabilitation is associated with an absolute risk reduction in cardiovascular mortality from 10.4% to 7.6% when compared to those who do not receive cardiac rehabilitation.

What to do when you get home

Wound care

- The clear dressing that has been placed on the puncture site must be removed 24 hours after the procedure.
- Do not bath for 5 days after the procedure, although you can still have showers. Ensure the wound is dry before getting dressed.
- The area where the sheath was inserted can be bruised and sore for up to 2 weeks after the procedure. If it is uncomfortable you can take over the counter painkillers

If you notice any of the following please contact your GP as soon as possible:

- A hard, tender lump under the skin around the wound (pea-sized lump is normal).
- Redness, increasing pain or discharge at the site
- If you develop a temperature/fever
- Pins and needles, loss of colour, warmth, sensation

The dye used in your procedure contains iodine. There is a small

chance that you may develop a delayed skin reaction to the dye up to one week after your procedure. If this occurs please consult your GP.

You may also be asked to have further blood tests post procedure to check your kidney function.

Bleeding

If there is any profuse bleeding from the wound immediately call 999 and follow the instructions below.

If there is a small bleed (small ooze) from the wound when you are at home:

1. Lie flat (if arm was used, raise our wrist across your chest and if groin was used there is no need to raise your arms)
2. Apply pressure directly over the site for 10 minutes
3. If it doesn't stop – call 999.

Chest pain

Your chest is likely to feel tender after your procedure. This is normal and should settle within a few days. If your pain lasts longer than 10 minutes after using your GTN medicine, dial 999.

What happens when I leave hospital?

- You will need to be collected by car. Sit in the front passenger seat in a reclining position or in the back with your leg straight (if your wound is on your leg). Lie on a couch or bed when you get home to keep your leg as straight as possible. If your wrist was used make sure you avoid using this arm for lifting and pushing yourselves up from your seat.
- You should drink plenty of fluids for the first 24 hours to clear the contrast from your body. You must avoid alcohol for 24 hours.

Returning to normal activity

Avoid any heavy lifting or strenuous activity for at least a week as this increases the pressure in the groin or wrist area and could cause it to bleed. If you have had an angioplasty, wait for cardiac rehabilitation to guide you on when to start exercising.

Returning to work

This depends on your job and the results of your angiogram. Please follow the advice given to you by your doctor and nurse.

If you have had an angioplasty, you will usually be able to return to work after a week unless your job involves strenuous activity or heavy lifting. If you have had an emergency angioplasty or a heart attack you may need to take a few weeks off. Check with your doctor or nurse when you can go back to work before leaving the hospital.

Driving

According to the DVLA, (for car or motorcycle) you must not drive for:

- 48 hours after an angiogram
- 1 week if you had an angioplasty, it was successful and you don't need any more surgery.
- 4 weeks if you had an angioplasty after a heart attack but it wasn't successful.
- 4 weeks if you had a heart attack but didn't have angioplasty

Check with your doctor to find out when it's safe for you to start driving again. You must also let your insurance company know you have had this procedure.

If you drive a bus, coach or lorry you must by law inform DVLA

and the insurance company and stop driving for 6 weeks after your procedure or heart attack. You can only start driving these types of vehicles once you have been assessed by your doctor or GP.

Angina and driving

You may continue to drive if you have angina (even if you need medication) unless it happens while resting, driving or with emotion. You must stop driving until your symptoms are under control if it does.

Bus, coach and lorry drivers must tell the DVLA if they have angina.

All driving restrictions will be discussed and explained during your preadmission assessment. If you have access to the internet, current DVLA regulations are available at www.dvla.gov.uk

Useful sources of information:

British Heart Foundation information line

08450 70 80 70
www.bhf.org.uk

Driver Vehicle and Licensing Agency (DVLA)

0300 790 6801
www.dvla.gov.uk

Patient advice and liaison service (PALS)

01268 394440
www.basildonandthurrock.nhs.uk
uk
pals@btuh.nhs.uk

Not to be photocopied

Basildon University Hospital
Nethermayne
Basildon, Essex SS16 5NL

01268 524900

Minicom 01268 593190

www.basildonandthurrock.nhs.uk

Patient Advice and
Liaison Service (PALS)
01268 394440
pals@btuh.nhs.uk

The Trust will not tolerate aggression, intimidation or violence.

This is a smokefree Trust.
Smoking is not allowed in any of our hospital buildings or grounds.

This information can be provided in a different language or format (e.g. large print, Braille or audio version) on request