

Day Case Coronary Angiogram (Cardiac Catheterisation) Patient Booklet

Contents

1. Introduction
2. What is cardiac catheterisation?
3. What are the benefits of cardiac catheterisation?
4. Why am I having this investigation?
5. What are the risks?
6. Are there any alternatives?
7. Pre-admission preparation
8. Pre hospital preparation
9. What happens in hospital?
10. The Approach
11. The procedure
12. What happens afterwards?
13. After the procedure
14. Aftercare of your catheter site
15. Contact Information

1. Introduction

This Booklet has been designed to provide the necessary information you need to make your stay on Bronte ward a pleasant one. It explains the benefits, risks and alternatives to assist you in making your own decisions. It will explain the procedure and recovery process to you, so that you are fully informed and know what to expect. It is **very important** that you **read all the information** as it relates to your pre admission preparation as well as the care and treatment you will receive in hospital, including the process for going home.

2. What is Coronary Angiography (Cardiac Catheterisation)

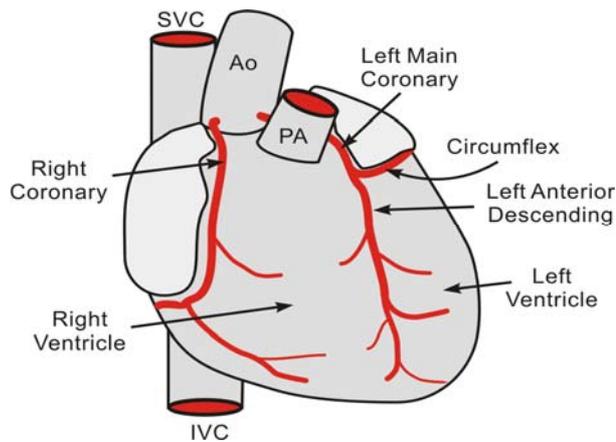


Diagram of the Coronary Arteries

Cardiac catheterisation is the main investigation performed on people with some of the symptoms in section 4. If there were indications that your coronary arteries may have become narrowed or blocked, the exact position and severity of the narrowing or blockage needs to be known in order to decide most appropriate treatment for you.

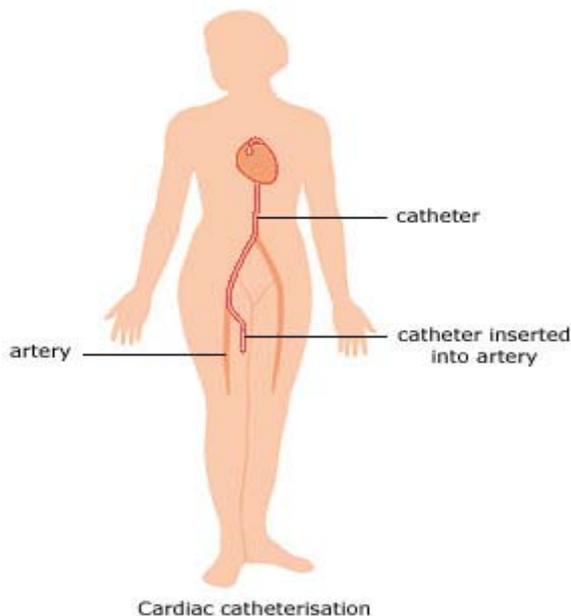


Diagram Demonstrating the Catheter Insertion

Cardiac catheterisation is performed under local anaesthetic, but a sedative may be given to help you to relax if necessary. A thin tube (cardiac catheter) is inserted into

the femoral artery (main artery in your leg) in the groin or the radial artery (in your wrist) and positioned in the heart.

A special (radio – opaque) dye is then injected through the catheter into the 3 main arteries and the pictures recorded. As well as views of the coronary arteries, heart muscle function and heart valves can be viewed during the procedure.

3. What are the benefits of Cardiac Catheterisation

Cardiac catheterisation gives vital information about the blood pressure inside the heart and how well the pumping chambers and valves are working. Most importantly it shows whether there is any narrowing of the coronary arteries, demonstrating their position and the severity of the narrowing. This information is vital to help plan further treatment.

4. Why am I having this investigation?

Cardiac catheterisation is a recognised method of improving the blood flow to the heart muscle. The Doctor or Nurse Specialist may consider doing a cardiac catheterisation if you have had any of the following: -

- A heart attack
- Chest pain
- Chest tightness or discomfort
- Pains in the jaw, throat or shoulders
- Shortness of breath
- Irregular heart beats
- Heart murmur (heart valve problems)

5. What are the risks?

A common after effect is bruising in the groin. This is not serious but may be uncomfortable for a few days.

Serious complications are extremely rare, but as with any invasive medical procedure there is a small element of risk. In less than 1 in every 1000 tests complications such as heart attack and stroke may occur. However it is important to understand that the Doctor / Nurse Specialist would **not** have recommended this test unless he / she felt that the benefits of the test would far outweigh any of the small risks. Any concerns you have should be discussed with the Cardiologist before the test to ensure that you understand what the risks are.

6. Are there any alternatives?

There are other tests available to assess the arteries of your heart, although the information gained from them is not as extensive as with cardiac catheterisation. You have been recommended for cardiac catheterisation because it was felt to be the best test for you. Please discuss any concerns with your cardiologist.

7. Pre – Admission Preparation

7.1. Eating and Drinking

You should have no food after 6am on the morning of your admission, because an empty stomach helps to prevent the possibility of you being sick during the procedure. However you are allowed clear sugar free drinks such as black tea, coffee or water up to 7am. Refreshments will be provided after the procedure. As you have to lie flat in bed for 2 hours following the procedure, it will be difficult for you to eat a hot meal for lunch. Therefore we offer a sandwich lunch for day-case patients.

7.2. Diabetics

Remember to have a light breakfast (e.g. tea and toast) before 6am and take half of your usual dose of insulin on the morning of your admission before your light breakfast. Please remember to bring your glucose sweets or digestive biscuits with you to hospital.

Please omit all diabetic tablets on the morning of admission. However if you are taking **Metformin**, you must stop this **2** days prior to your admission. This will not affect your long-term diabetic control. Metformin is restarted 2 days after the procedure.

7.3. Medication

All other medication should be taken as normal with a little water. This includes Aspirin, tablets for high blood pressure and diuretics. If you are concerned about taking Diuretics due to having a long journey to hospital, you may omit them, however it is recommended where possible that you take them. Please bring all your medication with you (including drops and lotions), as this is very helpful for doctors and nurses to establish exactly what you are taking. You should take your medication as normal during the day while you are in hospital.

If you are taking **Warfarin**, please stop these 4 days before your admission and contact the clinic or doctor who supervises your blood tests to let them know of your hospital admission. Some patients may need an alternative form of anticoagulation (drugs that prevent blood clotting) and all patients stopping Warfarin will need a blood test on the day of admission. Please remember to bring your anticoagulant record into hospital with you. In rare cases where your clotting levels have not returned to a safe limit, the procedure will be postponed to avoid unnecessary complications.

If you are taking **FRAGMIN** injections, omit the dose you normally take on the morning of the procedure. This will reduce the possibility of excessive bleeding during or after the procedure.

7.4. Cash & Valuables

Please do not bring large amounts of cash / jewellery with you, because of limited place for safekeeping. You will be allowed to keep spectacles and hearing aids with you during the procedure.

7.5. Clothing

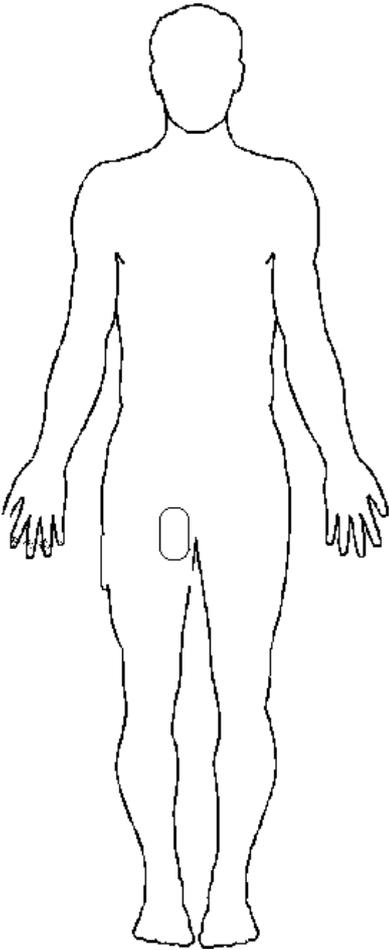
Please bring a dressing gown / robe, slippers and personal toiletries with you.

7.6. Going Home

You must make arrangements for someone to collect you and take you home on the day of the procedure, as you are unable to drive or take public transport following the procedure. You may have a friend or relative accompany you in a taxi. You must also have someone to stay with you overnight.

If you cannot arrange for a relative or friend to stay with you, or provide an escort or transport home, we will not be able to carry out the cardiac catheterisation as a day case. Please phone the Cardiology administrator on 0208 546 7711 extension 2106 to inform the staff of your situation.

8. Pre hospital preparation



Please shave the right side of your groin prior to admission. This should cover an area of approximately 12 square cm (4 inches). This is to reduce the risk of infection and make it more visible to insert the catheter. **(See diagram)**

PLEASE NOTE THAT IF YOU HAVE BEEN ADVISED THAT YOU ARE HAVING A RADIAL APPROACH YOU DO NOT NEED TO SHAVE YOUR GROIN.

Please also remove all nail varnish and any jewellery however the use of light make-up is allowed if you prefer.

Ladies: the date of your last menstrual period is required to be recorded on admission. If there is any possibility that you may be pregnant, a pregnancy test will be done on admission.

You may wish to bring reading material to help you to pass the time after the procedure is completed. You may find it helpful to make a list of questions to take with you when you see your cardiologist.

If for any reason you need to cancel reschedule your procedure, please contact the Cardiology Administrator on the number above.

9. What happens in hospital?

Bronte ward is located in Esher wing on level 5 in Kingston Hospital. Please report to the Reception Desk. A nurse will meet you and take you to the ward area. The nurse will check your personal details, ask questions concerning your medical history, check your vital signs, weight, height and pedal pulses (pulses in your feet). If you are allergic to Iodine or have any other allergies please inform your nurse. You will also be seen by the Nurse Specialist who will obtain a medical history from you, explain the procedure to you and answer any questions you may have. You will be asked to sign a consent form. After changing into a gown you will be escorted to the waiting area of the catheter laboratory where the procedure will be done.

10. The Approach

There are two different approaches to coronary angiogram, femoral (via the groin) and radial (via the wrist). The femoral (groin) approach is the most common, but on occasion when the groin is not appropriate a radial (wrist) approach will be used. The method used will be decided by your cardiologist, based on your individual needs. The procedure that you are having is the same in both cases; it is just the way of gaining access that is different.

11. The Procedure

The doctor will start the procedure by cleaning the area of your groin/wrist with an iodine based antiseptic solution, and covering it with sterile sheets. Throughout the procedure you will be attached to a heart monitor machine. A local anaesthetic will be injected into the area where the catheter will be introduced. You may experience a tingling sensation for a few seconds. When the area of the skin becomes numb the doctor inserts the catheter into the artery. You may experience pressure initially when the catheter is inserted. If you wish, you may be able to view the catheter being guided through the artery into your heart on the screens. You may feel your heart flutter, speed up or miss a beat, this is quite normal and will only last for a short while.

When the catheter is in the correct position a contrast dye will be slowly injected. You may be asked to cough, breathe deeply or hold your breath from time to time by the doctor. This helps the dye to move through the bloodstream of the heart. It is important that you carry out these instructions. You may feel a warm glowing, flushing sensation when the dye is injected, lasting a few seconds.

A series of X-rays will be taken once the dye is injected. The X-ray machine will be moved around you and the bed will be moved to obtain the correct position. Some people may experience a metallic taste in the mouth or a feeling of wanting to go to the toilet. These sensations are not unusual. If you feel sick, itchy or have any chest pain or discomfort you must tell the doctor.

The procedure takes approximately 15 – 30 minutes.

12. What happens afterwards?

Wrist:

If the wrist is used, the catheter (tube) will be removed before you leave the lab and you will return to the ward with a TR (Trans radial) band which is a special type of plastic bracelet, underneath which is a small balloon. The balloon will press hard on the artery to stop the bleeding. The bracelet will be taken off before you go home. Please note: do not wear any jewellery including watches on that wrist for 5-7 days. No blood pressures or blood samples should be taken from this arm for 36 hours.

Groin:

1. Often the nurse will remove the tube in your groin once you return to the ward area. Pressure will then be applied to your groin to ensure there is no bleeding from the artery. You will remain on bed rest for a period of time following the removal of the tube from your groin. This is to prevent any bleeding occurring when you start walking. You must lie flat for at least one to two hours after removal of the tube and it is important that you keep your leg straight at all times during the period of bed rest.

2. A device called an **angioseal/exoseal** is sometimes used to seal the artery and avoid pressing to ensure no bleeding. This is a small collagen plug. In this case the tube will be removed in the lab and the angioseal will be placed in the artery before you leave the lab. It dissolves within 3 months. The collagen plug can sometimes be felt as a small pea sized lump in your groin; this is normal and will slowly reduce as it dissolves.

During the 3 months whilst the collagen plug is being absorbed you will be asked to carry a card informing any doctor who may wish to treat you, that it is there.

Having an angioseal may reduce the length of time in hospital after the procedure although they are not appropriate for use in every patient.

In all cases:

A nurse will check your pulse and blood pressure and check the wound site at regular intervals to ensure all is well. You must inform a nurse if you feel unwell or peculiar after the investigation. Bedpans and urinals will be provided as required, as it is unsafe to get out of bed to use the toilet. You will be allowed out of bed once the nursing staff are satisfied the wound is stable.

It is very important that you drink plenty of fluids to “flush” the dye out of your body afterwards. Light refreshments will be offered following the procedure.

Your doctors will inform you of the results of your cardiac catheter prior to your discharge. Occasionally this may not be until late evening as the doctor may be busy doing other investigations.

We aim to discharge you after you have been satisfactorily mobilising for approximately 2 hours. However the ward is usually busy at this time and we appreciate your patience as we seek to look after everyone’s needs.

13. After the Procedure

Depending on the results of your test, you may be advised to take medicines, to have “angioplasty with stents” and less frequently to have heart surgery. You will be able to discuss this with your cardiologist. Coronary Angioplasty is a procedure where a narrowed section of a coronary artery is widened using a balloon and a stent (small tube) attached to a catheter. The balloon at the tip of the catheter is blown up at the narrowed section of the artery to force it wider. A stent is then left in place to keep the artery open. This procedure is usually carried out from the artery in the groin. It is important to ask questions and make sure that you receive explanation in a manner that you understand.

14. Aftercare of your Catheter site

Before leaving the Angiogram Recovery Bay, the nursing staff will talk to you about how to care for your wound, how to recognise and treat any problems and what to expect. You will also be given an advice sheet.

15. Contact Information

If you have any additional access needs, please contact the Cardiology Administrator on **0208 546 7711 extension 2106** and we will be pleased to discuss your requirements so that you do not experience any difficulty attending your appointment. (9:00 -17:00hrs)

If you need to cancel or reschedule your appointment please contact our administrator on the above number.

If there is any change in your condition or you have any further questions (following your pre-assessment appointment) please contact Sally Wilson on **0208 546 7711 ext 6182** or our administrator on the above number. (9:00 -17:00hrs)

If you are worried about any aspect of your recovery (after your procedure) please contact the Cardiac specialist nurses via on **0208 546 7711 ext 6182**. (09:00- 17:00), after 17:00hrs please call Bronte ward on **0208 934 2894/5**

Useful web sites are www.patient.co.uk
www.nhsdirect.nhs.uk
www.bhf.org.uk

If you would like this leaflet in your own language, in large print, in Braille or audio tape please call 020 8934 2300