Patient information and consent to cardiac catheterisation and coronary angiography

Key messages for patients

- **Please read your admission letter carefully.** You should not eat or drink anything other than your medication for at least two hours before the test. It is important to follow the instructions we give you about not eating or drinking or we may have to postpone or cancel your operation.

- **Please read this information carefully,** you and your health professional will sign it to document your consent.

- **It is important that you bring the consent form with you when you are admitted for surgery.** You will have an opportunity to ask any questions to the surgeon or anaesthetist when you are admitted. You may sign the consent form either before you come or when you are admitted.

- **Please bring with you all of your medications and its packaging (including inhalers, injections, creams, eye drops, patches, insulin and herbal remedies), a current repeat prescription from your GP, any cards about your treatment and any information that you have been given relevant to your care in hospital, such as x rays or test results.**

- We will confirm any medication changes required for your procedure.

- **Please call ward K2, telephone number 01223 256233** if you have any questions or concerns about this procedure or your appointment.

After the procedure we will file the consent form in your medical notes and you may take this information leaflet home with you.

**Important things you need to know**

Patient choice is an important part of your care. You have the right to change your mind at any time, even after you have given consent and the procedure has started (as long as it is safe and practical to do so).

We will also only carry out the procedure on your consent form unless, in the opinion of the health professional responsible for your care, a further procedure is needed in order to save your life or prevent serious harm to your health. However, there may be procedures you do not wish us to carry out and these can be recorded on the consent form. We are unable to guarantee that a particular person will perform the procedure. However the person undertaking the procedure will have the relevant experience.

All information we hold about you is stored according to the Data Protection Act 1998.
About cardiac catheterisation and cardiac angiography

Non-invasive tests can provide a lot of valuable information about the heart. However, sometimes it is not possible to make important decisions about a patient’s treatment unless a test called ‘cardiac catheterisation’ is performed.

Cardiac catheterisation, also known as ‘coronary angiography’ gives vital information about the blood pressure inside your heart, and how well the pumping chambers and valves are working. Most importantly, it shows whether there are any narrowings in the coronary arteries and demonstrates their position and severity. This information can be used to help plan further treatment.

Intended benefits

To provide valuable information about how your heart is functioning which then helps us to plan further treatment.

Who will perform my procedure?

This procedure will be performed by a consultant cardiologist or cardiology specialist registrar.

Before your procedure

Most patients attend a pre-admission clinic, where you will meet a member of the nursing staff. At this clinic, we will ask for details of your medical history and carry out any necessary clinical examinations and investigations. The procedure will be explained to you. Please ask us any questions about the procedure, and feel free to discuss any concerns you might have at any time.

We will ask if you take any tablets or use any other types of medication either prescribed by a doctor or bought over the counter in a pharmacy. Please bring all your medications and any packaging (if available) with you. Please tell the ward staff about all of the medicines you use. If you wish to take your medication yourself (self-medicate), please ask your nurse. Pharmacists visit the wards regularly and can help with any medicine queries.

This procedure involves the use of local anaesthesia. We explain this at the end of this leaflet.

Most people have the test as a day case.

You should not eat or drink anything for at least two hours before the test. However, on the morning of the procedure please take the medication as advised by K2 staff.

When you arrive, you will meet your nurses who will prepare you for the procedure.

Please inform medical or nursing staff if there is any possibility that you may be pregnant.

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You will be taken to the X-ray room (catheter lab) for the test.

You may be asked to shave the groin or wrist area prior to your procedure, however this can be done by nursing staff on the day.

**During the procedure**

- The test usually takes between 20 minutes and an hour.
- You will change into a gown before your procedure and a nurse will prepare you by going through a check list. When it is your turn for the procedure you will be transferred to the cath-lab where the staff **will check your name, personal details and confirm the procedure you are expecting**.
- Once that is complete, the nursing staff will make you comfortable on the X-ray table. Monitoring devices may be attached to you, such as a heart monitor (ECG) and a monitor to check your oxygen levels (a pulse oximeter).
- A catheter is a long, flexible, hollow plastic tube, about 2mm in diameter. It is passed into a vein or artery either in the groin or, sometimes, the arm.
- You will be given a local anaesthetic by the person carrying out the procedure, using a small needle to numb the area where the catheter is put in. A local anaesthetic is a drug which numbs a specific area of the body for an operation. It stings for a few seconds when injected and then the area becomes progressively more numb. You will be fully awake during the procedure although you should feel no pain. The numbness usually fades after a few hours but occasionally it may last longer.
- Following the injection of local anaesthetic, a small incision will be made over the groin or wrist, and a fine sheath will be inserted. The operator will then pass a series of catheters through the blood vessels and into the correct position in the heart. You will not feel the catheter moving around inside your chest, but you may be aware of the occasional ‘missed’ heartbeat or ‘extra’ beat. You can watch the procedure on the video screen if you want to. Feel free to ask questions about what is going on.
- While you are having the test, you will be linked to an ECG recorder which records your heart rate and rhythm. This will be checked continuously. The blood pressure at the tip of the catheter will also be monitored.
- X-ray pictures of your coronary arteries are taken by injecting a special fluid (‘contrast’) through the catheter into the coronary arteries. A further picture of the left ventricle of your heart may be taken by rapidly injecting contrast. The contrast sometimes causes a hot, flushing sensation which lasts a few seconds. This sensation may pass to your groin and give you the impression that you have wet yourself, even though you have not. You will be warned when to expect this. People occasionally feel a short-lived, mild chest pain during the test. This does not necessarily mean anything is going wrong, but you should tell the doctor about the pain.
After the procedure

Once your procedure is completed you will be transferred to the recovery ward where you will be looked after by specially trained nurses, under the direction of your cardiologist.

When the test is completed, the catheter and sheath are removed. If the catheter was inserted in your groin, pressure is applied to your leg for about 15 minutes. If the catheter was inserted into your wrist a pressure band will be applied and worn for about two to three hours to prevent bleeding. Some people feel ‘washed out’ for a few hours after the test. A nurse will examine your groin or arm several times after the test, to check for any possible bleeding.

The site where the catheter was inserted may be tender for a few days. Most people return to normal after a day or two, but can vary from one person to another.

**Eating and drinking**. After this procedure, you should not have anything to eat or drink until advised - this is usually for about one to two hours.

**Getting about after the procedure**. We will help you to become mobile as soon as possible after the procedure. This helps improve your recovery and reduces the risk of certain complications.

**Leaving hospital**. Generally most people who have had this procedure will be able to leave hospital the same day generally three to four hours after the procedure. However, the actual time that you stay in hospital will depend on your general health, how quickly you are recovering from the procedure and your doctor's recommendations.

**Resuming normal activities including work**. Usually you can resume normal activities after 48 hours. Your doctor will advise you on how quickly you can resume normal and more vigorous activity.

**Special measures after the procedure**

We will give you a post procedure leaflet about any special measures you need to take after the procedure.

**Check-ups and results**: Before you leave hospital, the doctor will come and discuss the results of your angiogram. At this time any further treatment needed will be discussed.

Depending on the results of your tests, you may be advised to take medication, to have ‘angioplasty with stents’, or to have heart surgery. You will be able to discuss this with your cardiologist.
Significant, unavoidable or frequently occurring risks of this procedure

A common after-effect is bruising and bleeding at the puncture site. This is not serious but may be uncomfortable for a few days. It is also important that you watch the wound for any signs of infection. Details of this will be in the post procedure leaflet.

There is a risk of vascular injury which may result in vascular surgical repair. Please let us know if you have any allergies and sensitivities as there is a risk of an allergic response to contrast.

Serious complications are very rare, but, as with any invasive medical procedure, there is a risk. The chances of the test causing a serious complication, such as death, heart attack or stroke, are less than 1 in every 1000. So, your doctor will not recommend this test unless he or she feels that the benefits outweigh this very small risk. You should discuss any worries with a doctor before the test, and be sure that you understand what the risks are.

Alternative procedures that are available

There are other tests available to assess the arteries of your heart, although this test gives the most complete information. Your cardiologist has recommended cardiac catheterisation because he/she feels that this is the best test for you. However, if you have any concerns about the procedure, you should discuss these with your doctor/cardiologist.

Information and support

You will be given some additional patient information before and after the procedure, for example leaflets that explain what to do after the procedure and what problems to look out for. If you have any questions or anxieties, please feel free to ask a member of staff on 01223 256233.

Further information is also available on the British Heart Foundation website: www.bhf.org.uk

Local anaesthesia

In local anaesthesia the local anaesthetic drug is injected into the skin and tissues at the site of the operation. The area of numbness will be restricted and some sensation of pressure may be present, but there should be no pain. Local anaesthesia is used for minor operations such as stitching a cut, but may also be injected around the procedure site to help with pain relief. Usually a local anaesthetic will be given by the doctor doing the procedure.

For more information about anaesthesia, please visit the Royal College of Anaesthetists’ website: www.rcoa.ac.uk
Information about important questions on the consent form

1 Creutzfeldt Jakob Disease (‘CJD’)

We must take special measures with hospital instruments if there is a possibility you have been at risk of CJD or variant CJD disease. We therefore ask all patients undergoing any surgical procedure if they have been told that they are at increased risk of either of these forms of CJD. This helps prevent the spread of CJD to the wider public. A positive answer will not stop your procedure taking place, but enables us to plan your operation to minimise any risk of transmission to other patients.

2 Photography, Audio or Visual Recordings

As a leading teaching hospital we take great pride in our research and staff training. We ask for your permission to use images and recordings for your diagnosis and treatment, they will form part of your medical record. We also ask for your permission to use these images for audit and in training medical and other healthcare staff and UK medical students; you do not have to agree and if you prefer not to, this will not affect the care and treatment we provide. We will ask for your separate written permission to use any images or recordings in publications or research.

3 Students in training

Training doctors and other health professionals is essential to the NHS. Your treatment may provide an important opportunity for such training, where necessary under the careful supervision of a registered professional. You may, however, prefer not to take part in the formal training of medical and other students without this affecting your care and treatment.

4 Use of Tissue

As a leading bio-medical research centre and teaching hospital, we may be able to use tissue not needed for your treatment or diagnosis to carry out research, for quality control or to train medical staff for the future. Any such research, or storage or disposal of tissue, will be carried out in accordance with ethical, legal and professional standards. In order to carry out such research we need your consent. Any research will only be carried out if it has received ethical approval from a Research Ethics Committee. You do not have to agree and if you prefer not to, this will not in any way affect the care and treatment we provide. The leaflet ‘Donating tissue or cells for research’ gives more detailed information. Please ask for a copy.

If you wish to withdraw your consent on the use of tissue (including blood) for research, please contact our Patient Advice and Liaison Service (PALS), on 01223 216756.
Privacy & dignity
Same sex bays and bathrooms are offered in all wards except critical care and theatre recovery areas where the use of high-tech equipment and/or specialist one to one care is required.

We are a smoke-free site: smoking will not be allowed anywhere on the hospital site. For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

Other formats:
If you would like this information in another language or audio, please contact Interpreting services on telephone: 01223 256998, or email: interpreting@addenbrookes.nhs.uk For Large Print information please contact the patient information team: patient.information@addenbrookes.nhs.uk.

Document history
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Cardiac catheterisation and coronary angiography, CF022, V6, December 2019
Consent Form

Cardiac catheterisation and coronary angiography

A Patient's side: [XXX] or N/A

Consultant or other health professional responsible for your care

Name and job title:

☐ Any special needs of the patient (e.g. help with communication)? 

Please use ‘Procedure completed’ stamp here on completion:

B Statement of health professional (details of treatment, risks and benefits)

I confirm I am a health professional with an appropriate knowledge of the proposed procedure, as specified in the hospital’s consent policy. I have explained the procedure to the patient. In particular, I have explained:

a) the intended benefits of the procedure (please state)

To provide valuable information about how your heart is functioning which helps us to plan further treatment.

b) the possible risks involved. Addenbrooke’s always ensures any risks are minimised. However all procedures carry some risk and I have set out below any significant, unavoidable or frequently occurring risks including those specific to the patient

   - Bruising and bleeding at the puncture site.
   - Vascular injury resulting in vascular surgical repair.
   - Allergic response to contrast.
   - The chances of the test causing a serious complication, such as death, heart attack or stroke, are less than 1 in every 1000.
   - Infection after the procedure.

c) what the treatment or procedure is likely to involve, the benefits and risks of any available alternative treatments (including no treatment) and any particular concerns of this patient:

Patient safety – at the heart of all we do
d) any extra procedures that might become necessary during the procedure such as:

- Blood transfusion
- Other procedure (please state)

2 The following information leaflet has been provided:
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or □ I have offered the patient information about the procedure but this has been declined.

3 This procedure will involve:

- General and/or regional anaesthesia
- Local anaesthesia [X]
- Sedation
- None

Signed (Health professional): ____________________________ Date: ____________

Name (PRINT): ______________________________________ Time (24hr): ____________

Designation: __________________________________________ Contact/bleep no: __________________

C Consent of patient / person with parental responsibility

I confirm that the risks, benefits and alternatives of this procedure have been discussed with me and that my questions have been answered to my satisfaction and understanding.

Important: please read the patient information about this procedure and then put a tick in the relevant boxes for the following questions:

1 Creutzfeldt Jakob disease (CJD)
Have you ever been notified that you are at risk of CJD or variant CJD for public health purposes? If yes, please inform your health professional.

- Yes
- No

2 Photography, Audio or Visual Recording
a) I agree to the use of any of the above type of recordings for the purpose of diagnosis and treatment.

- Yes
- No

b) I agree to unidentified versions of any of the above recordings being used for audit and medical teaching in a healthcare setting.

- Yes
- No

3 Students in training
I agree to the involvement of medical and other students as part of their formal training.

- Yes
- No
Use of Tissue
a) I agree that tissue (including blood) not needed for my own diagnosis or treatment can be used and stored for ethically approved research which may include ethically approved genetic research.

b) Where additional clinical information is needed for the purposes of ethically approved research, I agree that relevant sections of my medical record may be looked at by researchers or by relevant regulatory authorities. I give permission for these individuals to have access to my records.

I have listed below any procedures that I do not wish to be carried out without further discussion.

I have read and understood the Patient Information about this procedure and the above additional information. I agree to the procedure or treatment.

Signed (Patient):
Name of patient (PRINT):
Date: D.D./M.M./Y.Y.Y.Y.

If signing for a child or young person; delete if not applicable.
I confirm I am a person with parental responsibility for the patient named on this form.
Signed:
Relationship to patient:
Date: D.D./M.M./Y.Y.Y.Y.

If the patient is unable to sign but has indicated his/her consent, a witness should sign below.
Signed (Witness):
Name of witness (PRINT):
Address:

Date: D.D./M.M./Y.Y.Y.Y.
Consent Form

Cardiac catheterisation and coronary angiography

D  Confirmation of consent

Confirmation of consent (where the treatment/procedure has been discussed in advance)
On behalf of the team treating the patient, I have confirmed with the patient that she/he has no further questions and wishes the treatment/procedure to go ahead.

Signed (Health professional): ............................................................... Date: ............................................................... M.M.Y.Y.Y.Y.Y.Y.

Name (PRINT): ............................................................................... Job title: ............................................................... 

Please initial to confirm all sections have been completed:

E  Interpreter’s statement (if appropriate)

I have interpreted the information to the best of my ability, and in a way in which I believe the patient can understand:

Signed (Interpreter): ............................................................... Date: ............................................................... M.M.Y.Y.Y.Y.Y.Y.

Name (PRINT): .............................................................................

Or, please note the language line reference ID number:

F  Withdrawal of patient consent

☐ The patient has withdrawn consent (ask patient to sign and date here)

Signed (Patient): ............................................................... Date: ............................................................... M.M.Y.Y.Y.Y.Y.Y.

Signed (Health professional): ............................................................... Date: ............................................................... M.M.Y.Y.Y.Y.Y.Y.

Name (PRINT): ............................................................................... Job title: ............................................................... 

For staff use only:
Hospital number:
Surname:
First names:
Date of birth:
NHS no: __ __ __ / __ __ / __ __
Use hospital identification label

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