

Patient information

CT Coronary Angiogram

What is a CT coronary angiogram?

This is an investigation using a high-resolution CT x-ray scanner to perform a test called a CT Coronary Angiogram. It shows pictures of the coronary arteries and can assess if you have any signs of disease in them which may be restricting the flow of blood being delivered to your heart muscle.

What are the symptoms that have led to me having this procedure?

You may have been having chest pain and/ or shortness of breath.

Why would I need this procedure?

To identify a potential cause of your symptoms and to examine the anatomy of your heart.

What should I do before I come into hospital?

Please contact the department by telephoning 0300 131 4662 (Eastbourne) or 0300 131 5141 (Conquest), no later than 7 days prior to your appointment, to confirm your attendance.

If you do not contact us to confirm, we will not be expecting you and your appointment MAY BE given to another patient.

The appointments office opening hours are Mon-Fri 0900 – 1700. If at any time you try to contact us and you cannot get an answer, PLEASE LEAVE A MESSAGE and someone will contact you.

Before your Cardiac CT scan we would ask that you **refrain from smoking and drinking any caffeine for 6 hours prior to your appointment, this will help control your heart rate. We also kindly ask that you NOT eat 2 hours before your scan.**

Please bring with you a list of all your prescription medication when you attend for your scan. Please could you also inform us on the above number if any of the following apply:

- * You have asthma, chronic bronchitis or wheeze requiring regular inhalers/puffers or steroids
- * You have known Atrial Fibrillation (AF)
- * You have had a previous adverse reaction to contrast
- * You have a Pacemaker
- * You have problems with your kidneys or are on a drug called Metformin for diabetes

Where will the procedure take place?

This investigation will be performed at Eastbourne District General Hospital or Conquest Hospital CT department. You may have one person only to accompany you whilst the examination is performed due to the available waiting room space within the Radiology Department. Any other people accompanying you may wait in the facilities at the front entrance of the Hospital adjacent to the Radiology Department.

What should I do before my scan?

Please try not to wear outer or under clothing that contain metal objects such as clips, clasps, zips, or embellishments. This may prevent you having to change into a gown for your scan.

What will happen during the test?

You will have a drug called a beta-blocker administered to slow your heart rate down prior to the scan, this will initially be given to you in tablet form but you may also require to have a further dose via a tube (cannula) inserted in your arm. Its effects are short acting.

For the test, you lie on a bed under a scanner. Some dye (called a contrast medium) will be injected into your arm to help to show up the blood vessels on the surface of the heart. We will also spray a nitrate under your tongue (called GTN Spray) to dilate these vessels and then the images are taken.

How will I feel afterwards?

This depends on how you respond to the rate-lowering drugs, but most people feel no ill effects.

How long will I be in hospital?

Expect to be in the CT department for between 2 to 4 hours. You will be asked to come to the department earlier than your actual scan time, so that your heart rate can be assessed and brought down to a suitable rate to ensure that we obtain the best possible images of the coronary arteries. As we can only scan patients when their heart rate is down to an appropriate level which takes a variable length of time.

What should I do when I go home?

If you have been given beta-blockers in the department prior to the scan, you may be required to stay in the department until your heart rate returns to a suitable level.

Please also be aware that you may not be able to drive following the beta-blockers, particularly if required intravenously, so you may need to make other arrangements for your travel home.

How soon will I be able to resume normal activities?

You may feel tired and should avoid strenuous activity for the rest of the day.

What are the potential risks and side effects?

Having a CT coronary angiogram does mean that you are exposed to some radiation. Every day we are exposed to small amounts of radiation which occurs naturally in the environment. Women who are pregnant will be advised to avoid radiation where possible, but if the mothers health is at serious risk she may be advised to have a test involving radiation, because the unborn baby depends on her health for survival.

The amount of radiation used in most medical tests is quite small, so if you have been told that it is likely that you have heart disease, and you need, for example, a coronary angiogram, the risks involved in not having the test may well be far greater than the risks from radiation. Overall, a CT coronary angiogram is less invasive than a standard coronary angiogram and therefore, carries less risk.

What are the expected benefits of treatment?

If the CT coronary angiogram finds evidence of coronary artery disease it will be possible to recommend treatment which may help to help reduce your risk of future heart problems.

Consent

Although you consent for this treatment, you may at any time after that withdraw such consent. Please discuss this with your medical team.

You will also be asked to give authorisation for your images to be sent for advanced cardiac CT analysis with our third-party provider (Heartflow Inc) in the USA if deemed clinically appropriate.

What are the alternatives?

The standard coronary angiogram is the 'Gold Standard' test as it can show narrowing's in even the very small arteries. It is however more invasive and may not be necessary at this stage (see separate information sheet). Stress echocardiography and nuclear medicine studies may also be alternatives; however these give functional information rather than showing narrowing's anatomically.

Sources of information:

EASTBOURNE

CT Department: 0300 131 4662

Coronary care unit: 0300 131 5872 Ext 735872

Cardiology Department: 0300 131 5450 Ext 735450

Rapid Access Chest Pain Nurse Specialist: 0300 131 5446

CONQUEST

CT Department: 0300 131 5141

Coronary Care Unit: 0300 131 5872 Ext 73 5872

Cardiology Department: 0300 131 5062 Ext 73 5062

Important information

The information in this leaflet is for guidance purposes only and is not provided to replace professional clinical advice from a qualified practitioner.

Your comments

We are always interested to hear your views about our leaflets. If you have any comments, please contact the patient experience team on 0300 131 4784 or esh-tr.patientexperience@nhs.net.

Hand hygiene

We are committed to maintaining a clean, safe environment. Hand hygiene is very important in controlling infection. Alcohol gel is widely available at the patient bedside for staff use and at the entrance of each clinical area for visitors to clean their hands before and after entering.

Other formats

If you require any of our leaflets in alternative formats, such as large print or alternative languages, please contact the Equality and Human Rights Department on 0300 131 4434 or esh-tr.AccessibleInformation@nhs.net

After reading this information are there any questions you would like to ask? Please list below and ask your nurse or doctor.

Reference

Written by: Sally Mason, Chest Pain Nurse Specialist.

The following clinicians have been consulted and agreed this patient information:
Professor Nik Patel and Dr Panagiotis Spanos (Consultant Cardiologists).

The directorate group that have agreed this patient information leaflet: Cardiovascular Medicine

Next review date: February 2026

Responsible clinician/author: Sally Mason, Chest Pain Nurse Specialist.

© East Sussex Healthcare NHS Trust – www.esht.nhs.uk