

IMAGING

CT Cardiac Scan (CTCA)

Preparing you for your admission, making you comfortable and cared for during your stay, and supporting you when you leave



KING EDWARD VII's
HOSPITAL

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This leaflet aims to answer your questions about having a cardiac CT scan (CTCA). It explains what will happen when you have the scan, and the benefits, risks and alternatives.

What is a cardiac CT scan?

A cardiac CT scan (CTCA) is a specialised scan that uses X-rays to look at your heart and the vessels that supply blood to it. A cardiac CT scan is also called a CT coronary angiogram. It can help your cardiologist find the cause of your heart problem and the best treatment options. A cardiac scan is helpful for people:

- At risk of developing coronary artery disease
- Who have had heart bypass surgery to check their grafts
- Detect fatty or calcium deposits (plaques) in the coronary arteries

What should I do before my scan?

If there is any chance you are pregnant please reschedule your scan. If you are taking tablets for erectile dysfunction – e.g. Viagra, Cialis, Levitra or Staxyn – stop using these for three days before your scan. Please talk to your referring doctor if you have any questions.

Checklist on the day of your scan:

- **Do not** drink or eat anything containing caffeine (e.g. tea, coffee or cola) from midnight before the scan
- **Do not** eat for two hours before your scan
- **Do** have a light breakfast

- **Do** arrive 15 minutes before your appointment
- **Do** tell us if you have ever had an allergic reaction to iodine
- **Do** bring in a list of medications you are currently taking
- **Do** take sips of water before your scan to keep hydrated

After your scan you will be offered a drink until you are able to leave the hospital.

Asking for your consent

The radiographer will ask if you are happy for the scan to go ahead. This is called verbal consent. You will also be asked to sign a form to agree to have the injection. Your radiographer will go through this form in detail. It is your decision and you can change your mind at any time. Please ask any questions you have at any point.

What medications are used as part of my scan?

Three medications can be used: *Beta Blockers* – These help lower your heart rate to capture still images of your heart. Some patients won't need beta blockers if their resting heart rate is low enough (~60bpm). Your cardiologist will assess whether Beta Blockers are safe to use (one of our experienced radiologists will administer when and if it necessary).

Glyceryl Trinitrate (GTN) – This is a spray administered under the tongue and acts as a vasodilator which allows for better visualisation of the coronary arteries.

X-ray Dye (Omnipaque) – This is an iodine-based contrast that is injected intravenously. It visualises the necessary vascular anatomy and is essential for the scan. Please refer to our CT Contrast information leaflet.

What happens during the scan?

We will:

- Ask you to change into a gown with the opening at the front (to allow for the easy application of ECG electrodes to measure your heart rate during the scan)
- Go through the consent and medications forms
- Have you lie down on the CT table and ECG electrodes will be applied to your chest to monitor your heart rate
- Check your blood pressure
- Place a small needle (cannula) in your arm
- The radiologist will administer Beta Blocker medication if necessary
- Move you through the CT machine and ask you to hold your breath
- Spray GTN under your tongue (if needed)
- Inject X-ray dye into the cannula in your arm as the scan is performed

What happens after the scan?

We monitor your blood pressure until it is safe for you to leave.

What are the risks?

CT scans use a small amount of radiation, and the benefits are believed to outweigh the risks. The contrast contains iodine which some people can be allergic to. The medications can also cause a temporary dip in your blood pressure.

Contact us

Please contact the Imaging team about any general concerns on 0207 467 4317. However, if you experience any symptoms of concern please contact your GP or go to your local Emergency Department (A&E).

Your comments and concerns

If you have any questions or concerns about your medicines, please speak to the staff caring for you. For support or advice please speak to your consultant or the Imaging department on 0207 467 4317.

Language and accessible support services

If you need an interpreter or information about your care in a different language or format, please get in touch.



KING EDWARD VII's
HOSPITAL

kingedwardvii.co.uk

King Edward VII's Hospital, 5-10 Beaumont Street
Marylebone, London W1G 6AA

020 7486 4411

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