

Computerised tomography (CT) Coronary Angiography using Dual Source Computerised tomography (CT)

Introduction

The Mater Private announced a major breakthrough in the diagnosis of heart disease with the first installation in Ireland and the UK of the Dual Source Computerised tomography (CT) scanner.

Dual Source Computerised tomography (CT) (128 slice) provides detailed images of the coronary arteries in a manner not previously possible using single source multi detector (including 64 slice) Computerised tomography (CT) scanners. The Dual Source Computerised tomography (CT) scanner will enable radiologists and cardiologists at the Mater Private to provide an accurate non invasive method of detecting coronary artery disease for our patients.

What is CT coronary angiogram?

• CT Coronary Angiogram is a scan of the heart which non-invasively demonstrates the coronary arteries and any associated abnormalities (as distinct from conventional invasive angiography).

Why is CT coronary angiogram performed?

- CT Coronary Angiogram is performed to visualise the coronary arteries non-invasively and to identify narrow, blocked, enlarged or malformed arteries without the need for angiography.
- This enables physicians to determine appropriate treatment.

Why would my doctor refer me for this scan?

Your doctor may request a CT coronary angiogram for you if:-



- there is a concern about the possibility of coronary artery disease, either because of specific risk factors, worrying symptoms, and/or when other tests are inconclusive or unhelpful.
- you require coronary artery evaluation but angiography is contraindicated
- to examine other parts of the heart including the heart muscle and heart valves

The indications for Coronary Computerised tomography (CT) continue to evolve. If your doctor is uncertain as to whether a coronary Computerised tomography (CT) is appropriate for you he/she can discuss it with our Consultant Radiologists.

What are the advantages of having my CT coronary angiography performed using the Dual Source Computerised tomography (CT) Scanner?

The Dual Source Computerised tomography (CT) scanner is the fastest Computerised tomography (CT) scanner currently available in Ireland. The net effect is twofold:

- it provides images of the heart that are of significantly higher quality than is possible using existing Computerised tomography (CT) scanners (including 64 slice Computerised tomography (CT))
- it can capture an accurate image of the heart even when the heart is beating rapidly or irregularly. Therefore most patients undergoing CT Coronary Angiogram at the Mater Private Network will not require medication (Beta-blockers) at the time of the scan to slow the heart.

Will I require medication to slow my heart rate during the scan?

• Using Dual Source Computerised tomography (CT) most patients can be scanned without the use of beta-blocker medication to slow the heart.



Is there any preparation for this scan?

- You do not need to fast however you should avoid drinking caffeine and smoking from midnight prior to the scan.
- If on medication you should take your tablets as normal, however please avoid taking Viagra, Cialis or Levitra for 48 hours prior to your scan.
- This scan should not be performed in pregnancy. Women of child bearing age should have this scan performed within 10 days of commencement of their menstrual cycle.

How long will I be in the X-Ray Department?

• You will be in the department for approximately 60 minutes.

What will happen during the procedure?

- A Consultant Radiologist will review the indication for your scan
- The procedure will be explained to you by one of our specialist
 Computerised tomography (CT) Radiographers and any specific concerns
 will be answered by the supervising Consultant Radiologist
- A Computerised tomography (CT) nurse will place an intravenous line in your arm
- You will be positioned on the Computerised tomography (CT) scanner table
- Your heart and blood pressure will be monitored
- X-ray dye (contrast) will be injected into a peripheral vein to make blood vessels visible on x-ray images
- Scanning time is approximately 15 seconds

Can I return to normal activities after the scan?

• Yes, you can return to normal activities immediately after the scan.

Who will report my scan?

• Coronary Computerised tomography (CT) scans are jointly read by a team of Radiology and Cardiology Consultants at the Mater Private Network.



Your scan will be analysed by them and a complete report sent directly to your referring doctor.

Reimbursement from your insurer

 Currently CT Coronary Angiogram is not directly covered by the main insurers. We recommend, however, that you contact your medical insurance company to determine whether it will be partly paid for under the outpatient scheme.

Medical radiation: risks versus benefits

We are all exposed to natural background radiation every day. Medical x-rays contribute a small additional dose on top of natural background radiation. There is no conclusive evidence of radiation causing harm at the levels patients receive from diagnostic x-ray exams.

The amount of radiation received during coronary Computerised Tomography (CT) approximates routine body Computerised Tomography (CT) or invasive coronary angiogram.

At all times we endeavour to keep patient radiation dose as low as possible and to perform only tests that are medically justified. As with any x-ray test the benefits of detection, diagnosis and treatment resulting from the examination should outweigh any potential risk.

For Further Information Please Do Not hesitate to Contact Our Cardiac Appointment Team At:

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Visit Our Website At www.materprivate.ie