
CARDIAC CT ANGIOGRAPHY (CCTA)

Patient Guide



What is Cardiac CT Angiography?

Cardiac CT Angiography is a revolutionary, heart-imaging test used by physicians to view and evaluate the coronary arteries which supply blood to the heart muscle. It provides a safe, fast, and non-invasive way to evaluate cardiac patients through the use of Computerized Tomography (CT), and can clearly reveal the types of blockages or buildup of plaque (whether of fatty or calcium deposits) in the walls of the arteries that cause heart muscle disease.

What can a Cardiac CT Angiography detect?

Cardiac CT Angiography provides such detailed three-dimensional images of the heart that it may detect heart disease at its very early stage, thus giving clinicians' precise information about:

- the presence of atherosclerosis (the buildup of plaque in the coronary arteries)
- the type of plaque including calcifications and non-calcifications
- the presence and amount of calcium build-up in the blood vessels
- the cause of atypical chest pains, particularly in cases where the symptoms are non-specific or are not clearly cardiac in origin

What to expect – Before, During, and After?

BEFORE (Patient Preparation)

- Do not consume any form of caffeine for 12 hours before the scan (such as coffee, colas, tea, energy drinks)
- Do not eat any solid foods for 4 hours before the scan.
- If you are using Viagra, Levitra, or Cialis, do **not** take these pills for 24 hours before the scan.
- Your estimated length of time at the hospital is 2-3 hours.
- Please take your usual medications with a sip of water.

DURING

- You may be given Metoprolol – a drug that is used to lower your heart rate and to assist in the viewing of the heart vessels.
- A specially trained CT technologist will administer the contrast (X-ray dye) through an intravenous catheter in your inner elbow area. This contrast ensures that the best images are made. **Please let the technologist know if you have an allergy to the contrast.**
- Please inform the technologist, if you are a diabetic and taking any metformin-containing drug.
- Your kidney function may be assessed. (Your blood creatinine level may be checked to see how well your kidneys are functioning, and also how the contrast dye can be cleared from your kidneys.)
- Your vital signs will be taken a few times and you will have an ECG monitor attached to you to record the readings of your heart rate and rhythm.

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- You may receive nitroglycerine under your tongue for the scan.
- Once inside the CT scan room, the procedure will last approximately 20 minutes.
- The table will move you through the donut-shaped scanner. An X-ray tube inside the machine will rotate around you, taking 128 pictures during each rotation. The actual scan time will be approximately 15 seconds or less.
- The CT technologist will talk to you and give you instructions throughout the scan. You may be asked to hold your breath for 15 seconds.

AFTER

- Before you are discharged, a final set of vital signs will be taken about half an hour after the CT.
- Make sure to eat and drink plenty of fluids after the scan.
- Do not do any heavy lifting or exercise for the remainder of the day.
- Metoprolol can last up to 3-6 hours in your system, so it may take a while for your heart rate to return to its normal rate.
- The radiologist who analyzes and interprets your scan will issue a report to your doctor.

How to find us:



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