



Coronary CT Angiography Patient Pre Exam Information

I. What is Coronary CT Angiography (CTA)

A Coronary CTA is an imaging test for determining whether fatty deposits or calcium deposits, also called plaque, have build up in the coronary arteries that supply the heart muscle. If untreated, the plaque can decrease the blood flow to the heart muscle which can in turn lead to heart disease. It is a special type of x-ray procedure. Intravenous contrast containing iodine is administered to obtain the best possible images of the coronary arteries.

Cardiac CT is used to evaluate:

- The heart muscle
- The coronary arteries
- The pulmonary veins
- The thoracic and abdominal aorta and
- The sac around the heart (pericardium)

This new technology has the ability to rule out significant narrowing of the major coronary arteries non-invasively and to detect “soft plaque” in the walls that has not hardened but may lead to future problems.

II. How to Prepare for the Exam

- Do not use Viagra or any similar medications 48 hours prior to the day of the exam. It is not compatible with the medications you will receive during the procedure (please ask your doctor if you have questions).
- Avoid energy or diet pills on the day before or the day of your exam (please ask your doctor if you have questions).
- On the day of the exam, please do not consume any caffeinated beverages or food (no coffee, tea, energy drinks, caffeinated sodas, chocolate, etc.).
- Do not eat for two hours prior to your scheduled appointment. You may drink only clear, non-caffeinated liquids until you arrive (ex. Water).

III. What to Expect

You will be called by one of the technologists for a telephone interview about your medical history two days prior to the actual study. The Radiologist will review this history prior to your study and determine if any additional information is needed.

If you are over 50 years old or have a history of kidney problems you may be required to have a blood test to evaluate your kidney function prior to receiving any contrast agent.

IV. On the day of the examination

Appointment Date and Time: _____

Radiology Facility Cambridge Hospital

- You will be brought to a patient monitoring area.
- A nurse will review your medical history.
- The nurse will place three small, sticky electrode patches on your chest. Chest hair may be partially shaved to help the electrodes stick. Your heart rate will be monitored before, during and after the study.
- If your heart rate is higher than 70 bpm and if there are no contraindications, you will be given metoprolol orally to lower your heart rate to the desired rate.
- Your blood pressure will be taken.
- A nurse will insert an IV line into a vein in your arm to administer contrast (dye) during your procedure.
- If your heart rate is still greater than 65-70 bpm, the nurse will inject intravenous metoprolol to lower your heart rate to the desired heart rate during the study.
- When your heart rate is at the desired level, you will be transferred to the CT scan room for exam imaging.
- You will be given oxygen via nasal cannula (a tube under your nose), to help you hold your breath when instructed during the study.
- Just prior to the exam, you may receive one tablet of nitroglycerine (under your tongue).
- You will be asked to raise your arms over your head for the duration of the exam. You will receive a contrast agent through your IV to help produce the images. It is common to feel a warm sensation as the contrast circulates through your body. This is a normal sensation. Some patients may also experience a metallic taste in their mouth.
- Once the technologist is sure that all the information is collected, you will be transferred from the scanner back to the monitoring area. You will be observed for another half hour to make sure you are doing well. Your blood pressure and heart rate will again be checked. At this point, the IV will be removed and you will be sent home.
- The entire exam process may take up to 2 hours.