



# Cardiac CT Angiography

Cardiac CT Angiography (CCTA) is a quick, non-invasive test utilizing advanced cardiovascular imaging technology to generate high-resolution 3D pictures of the heart and its vessels. During CCTA, intravenous (IV) contrast (dye) is administered to a patient and then scanning acquisition is performed by a large x-ray machine (i.e., CT scanner). Detailed images of the heart are then generated and reviewed by a certified advanced cardiac imaging specialist.

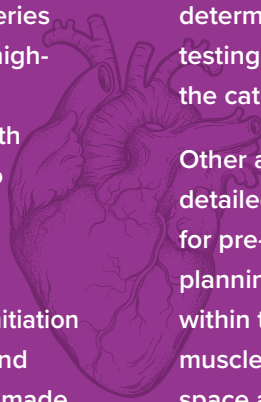
CCTA provides a detailed study of overall atherosclerotic plaque buildup in the coronary arteries (i.e. coronary artery disease) and potential high-risk blockages associated with this plaque.

This information provides your physician with a significant amount of personalized data to better inform you of your current and future risks of heart attack.

Further decision-making regarding need for initiation (or enhancement) of prevention therapies and heart-healthy lifestyle changes can then be made in a personalized manner.

CCTA additionally is a reliable tool to help determine the potential need for further invasive testing (e.g. invasive coronary angiography in the cath lab).

Other applications of this technology include detailed evaluation of the heart valves (beneficial for pre-heart valve replacement procedure planning), evaluation of possible clots or masses within the heart chambers, evaluation of the heart muscle (including potential heart wall defects) and space around the heart.



### Tell your health care provider about:

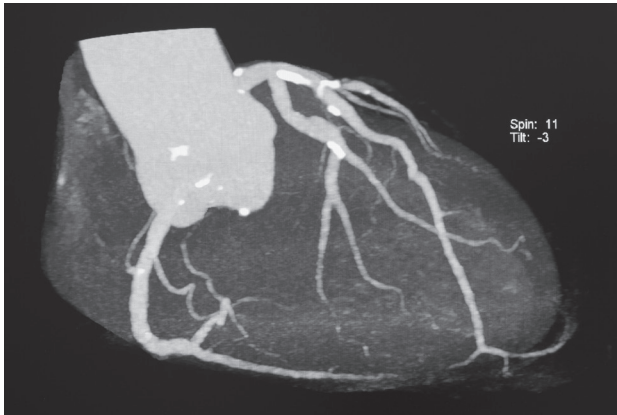
- Any history of allergic reaction to contrast dye
- All medicines you are taking
- Whether you are pregnant or may be pregnant
- Any anxiety disorders, chronic pain, or other conditions you have that may increase your stress or prevent you from lying still

### What happens before the procedure?

- **Tip: wear comfortable clothing**
- **12 hours before the procedure — avoid caffeine.** This includes tea, coffee, soda, energy drinks, and diet pills. Drink plenty

of water or other fluids that do not have caffeine in them. Being well hydrated can prevent complications.

- **For 4-6 hours before the procedure — stop eating and drinking.** The contrast dye can cause nausea, but this is less likely if your stomach is empty.
- **Ask your health care provider about changing or stopping your regular medicines.** This is especially important if you are taking diabetes medicines or medicines to treat problems with erections (erectile dysfunction).
  - *For 48 hours prior to the scan do not take phosphodiesterase type 5 inhibitors (ED, Erectile Dysfunction) medications i.e. Viagra, Levitra, Cialis.*



### What happens during the procedure?

- An IV will be inserted into one of your veins.
- You might be given medicine to control your heart rate during the procedure. This will help to ensure that good images are obtained.
- You will be asked to lie on an exam table. This table will slide in and out of the CT machine during the procedure for the scans.
- Contrast dye will be injected into the IV. You might feel warm, or you may get a metallic taste in your mouth.
- You will be given a medicine called nitroglycerin. This will relax or dilate the arteries in your heart.
- The person running the machine will give you instructions while the scans are being done. You may be asked to:
  - *Keep your arms above your head*
  - *Hold your breath*
  - *Stay very still, even if the table is moving*
- When the scanning is complete, you will be moved out of the machine.
- The IV will be removed.

### What can I expect after the procedure?

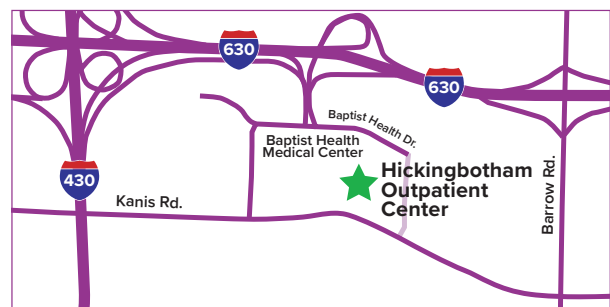
*After your procedure, it is common to have:*

- A metallic taste in your mouth from the contrast dye
- A feeling of warmth
- A headache from the nitroglycerin

### Follow these instructions at home:

- *Take over-the-counter and prescription medicines only as told by your health care provider.*
- *If you are told, drink enough fluid to keep your urine pale yellow. This will help to flush the contrast dye out of your body.*
- *Most people can return to their normal activities right after the procedure. Ask your health care provider what activities are safe for you.*
- *Keep all follow-up visits as told by your health care provider. This is important.*

*This information is not intended to replace advice given to you by your health care provider. Make sure you discuss any questions you have with your health care provider.*



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