

CT: Coronary Angiogram (CTA) Scan

How to prepare and what to expect

This handout explains how to prepare for a CT coronary angiogram (also called a coronary CTA), how it works, how it is done, what you will feel during the scan, and how to get your results.

What is a coronary angiogram CT scan?

A *computed tomography* (CT) scan uses a special X-ray machine to take detailed pictures of the inside of your body. A *coronary angiogram* CT, also called a *coronary CTA*, scans the inside of the tiny blood vessels of your heart.

It is a *noninvasive* procedure because we do not need to put anything in your heart. The scanner can scan your entire heart in just 5 heartbeats.



For your CT scan, you will lie on a table inside the CT machine.

How does it work?

- You will receive *contrast* (X-ray dye) through an *intravenous* (IV) tube that is placed in an arm vein. The contrast makes it easier for your radiologist to see your heart tissues in the scan images.
- Your technologist will monitor your heartbeat and will be able to tell when the contrast reaches your heart. The CT scanner will then take thousands of images of different parts of your heart.
- The scanner can put these images together to form a complete picture of your heart. Or, the images can also focus on only your arteries, heart muscle, or veins.
- If you are having chest pain, your radiologist will be able to see if one of your arteries is blocked. Very quickly, we will know what is causing your chest pain. This scan can also check for other problems in your chest.



A CT image of the heart and coronary arteries

How do I prepare?

- Do **not** drink anything that contains caffeine 12 hours before your scan. This includes coffee, some tea, energy drinks, and some sodas.
- Do **not** take energy pills or diet pills on the day before or the day of your scan.
- We advise that you eat only a light meal before your scan.
- You must arrive 30 minutes before your appointment time for your scan.
- When you arrive, we will give you a medicine to lower your heart rate.
- *Men:* Do **not** use Viagra, Levitra, Cialis, or any similar medicine for 24 hours before your scan. These drugs affect how your body reacts to the medicine you will receive for your scan.
- It is OK to take your regular medicines before your scan. Be sure to bring to your appointment a list of the medicines you are taking to and give it to the technologist.
- Wear loose, comfortable clothes on the day of your scan.
- We may ask you to remove any jewelry or any tops with a zipper or snaps. Metal objects may affect the scan.

Urgent Care

Even if you have your scan scheduled, it is important to get care as needed for any heart problems. **If you have chest pain, call 911 and ask to be taken to the UWMC Emergency Department.**

How is the scan done?

- A staff member will check you in at the Radiology front desk. A nurse will care for you during your scan.
- A CT technologist will start your IV and then the nurse will prepare you for your scan. We will give you medicine through your IV that will slow your heart rate slightly.
- We will then take you to the CT room. We will connect you to a heart monitor, and you will lie on the CT table.
- During your scan, we will give you 1 spray of nitroglycerine under your tongue.
- We will inject contrast into your IV. Soon after this injection, the scan will start.

- The CT table will move you in and out of the scanner as the scan is done.
- During the scan, the technologist will ask you to hold your breath for about 20 seconds at a time.
- After the scan, you will be moved out of the CT room. We will monitor you for a few minutes.
- Because CT uses X-rays, you may not have a family member or friend in the CT room during the scan.

What will I feel during the scan?

- You may have a warm, flushed feeling during the contrast injection. You may also have a metallic taste in your mouth. These reactions are normal. They should go away within 1 to 2 minutes.
- Once in a while, a patient will get itching and hives for up to a few hours after the injection. Please tell us if this happens. It can be relieved with medicine.
- If you start to feel lightheaded or short of breath, tell us right away. You may be having an allergic reaction to the contrast. A doctor or nurse will be nearby during the scan to help you, if needed.
- The medicine you receive to slow your heart rate may make you feel dizzy if you stand suddenly. This slight dizziness is very rare.

What should I do after the scan?

Be sure to drink plenty of fluids after the study and eat a meal.

Who interprets the results and how do I get them?

- **Urgent scans:** If you are having chest pain when you arrive, your CTA results will be given to the emergency room doctor. You will receive these results right away.
- **Planned scans:** If your scan was scheduled, your final results will be sent to your primary healthcare provider. The radiologist will not talk with you about your results. Your own provider will go over the results with you at your next office visit. You and your provider will decide the next step, such as treatment for a problem, as needed.
- You may also read your results on your eCare Results page. If you need copies of your images on disc, call 206.598.6206.

Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

- UWMC Imaging Services: 206.598.6200
- UW Roosevelt Radiology: 206.598.6868
- Harborview Imaging Services: 206.744.3105