

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.



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

How does the scan 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, 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 should I prepare?

- 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

If you are having chest pain, call 911 and ask to be taken to the UWMC Emergency Department.

Scheduled Procedures

If you are not having an emergency procedure and are able to prepare for your coronary angiogram:

- Do **not** drink anything that contains caffeine on the day before or the day of your scan. This includes coffee, some tea, energy drinks, and caffeinated sodas.
- Do **not** take energy pills or diet pills on the day before or the day of your scan.
- On the day of your scan, do **not** eat for 4 hours before your scan. During this time, you may drink clear liquids that do not contain caffeine.
- Plan to arrive at Imaging Services 1 hour before your scan is scheduled to start.
- *For men:* Do **not** use Viagra, Levitra, Cialis, or any similar medicine on the day before or the day of your exam. These drugs affect how your body reacts to the medicine you will receive during your scan.

How is the scan done?

- A staff member will check you in at the front desk. A nurse will be assigned to your care.
- A CT technologist will start your IV and then a nurse will prepare you for your scan. You will be given medicine through your IV that will slow your heart rate slightly.
- You then will be taken to the CT room. You will be connected to a heart monitor, and you will lie on the CT table.
- The contrast will be injected through 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 exam?

- You may notice a warm, flushed sensation during the contrast injection. You may also notice 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 develop itching and hives for up to a few hours after the injection. This can be relieved with medicine.
- If you start to feel light-headed 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 can make some people feel dizzy when they stand suddenly. The dizziness is slight and happens only rarely.

Who interprets the results and how do I get them?

If you are having chest pain when you arrive, your results will be given to the emergency room doctor. You will receive these results right away.

If you are having a scheduled CTA, 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.

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