

UW Medicine

## 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.*



*Scan this QR code with your phone camera for a digital copy of this handout.*

### What is a coronary angiogram CT scan?

CT stands for *computed tomography*. A 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?

- Keep taking your prescribed medicines as usual.
- *Women:* Tell your provider if you are pregnant.
- Starting 12 hours before your scan, do **not** eat or drink anything that contains caffeine. This includes coffee, some teas, some kombucha drinks, energy drinks, some sodas, chocolate, and foods with coffee flavoring.
- Do **not** take energy pills or diet pills the day before or the day of your scan.
- *Men:* Do **not** use Viagra, Levitra, Cialis, or any similar medicine for 48 hours before your scan. These drugs affect how your body reacts to the medicine you will receive for your scan.

## On the Day of Your Scan

- We advise that you eat only a light meal before your scan.
- Wear loose, comfortable clothes.
- Take your medicines as usual. Bring to your appointment a list of the medicines you are taking and give it to the technologist.
- Check in at Radiology **30 minutes before** your appointment time. A staff member will check you in at the Radiology front desk.
- *Women:* If there is any chance you may be pregnant, tell the CT technologist **before** the scan begins.
- We may ask you to remove any jewelry or any tops with a zipper or snaps. Metal objects may affect the scan.
- CT scans use X-rays. Because of this, you may not have a family member or friend in the CT room during the scan.

## Urgent Care

Even if you have a scan scheduled, be sure 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 CT technologist will start your IV and then the nurse will prepare you for the scan. This nurse will care for you during the scan.
- We will give you medicine through your IV to slow your heart rate slightly.

- We will then take you to the CT room. We will connect you to a heart monitor, and ask you to lie on the CT table.
- We will inject contrast into your IV. Soon after this injection, the scan will start.
- During your scan:
  - We will give you 1 spray of nitroglycerine under your tongue.
  - The table will move you in and out of the scanner.
  - The technologist will ask you to hold your breath for short periods, about 20 seconds at a time.
- After the scan, we will move you to another room. We will monitor you for a few minutes.

### What will I feel during the scan?

- You may feel warm or flushed during the contrast injection. You may also have a metallic taste in your mouth. These reactions are normal. They should ease 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, 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 scan 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, we will give your CTA results to the emergency room doctor. You will receive these results right away.
- **Planned scans:** If your scan was planned, we will send your final results to your primary care provider (PCP). The radiologist will not talk with you about your results. Your PCP will go over the results with you. You and your PCP will decide the next step, such as treatment for a problem, as needed.
- You may also read your scan results on your MyChart 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 - Montlake Imaging Services: 206.598.6200
- UW Roosevelt Radiology: 206.598.6868
- Harborview Imaging Services: 206.744.3105
- UWMC - Northwest Imaging Services CT: 206.668.2061