Patient Education

Coronary Computed Tomography Angiogram (Coronary CTA)
What is a coronary CTA?

There is now a way to study the inside of your tiny heart vessels without going inside your heart. This new procedure is called a coronary CTA. It is made possible because our new super-fast computer tomography (CT) scanner can scan the entire heart during 5-10 heartbeats.

How does the exam work?

Using an IV (intravenous line), a radiologist and technologist inject a non-toxic contrast into your vein. The CT scanner, which is monitoring your pulse rate, measures when the contrast will reach your heart vessels. When the contrast is in the heart vessels, the CT scanner takes thousands of pictures of your heart. The scanner then puts the pictures back together to form a picture of your heart. However, this final picture is not like a normal snapshot. This picture can be broken down to show only the arteries, muscle, or veins. This reconstruction allows the radiologist to see if you have a blockage of an artery that could cause you to have a heart attack.

In a matter of minutes, you can know if your chest pain is a heart attack or indigestion. In fact, because the coronary CTA scans your entire chest, the test can be used to check for several different problems.

How should I prepare for the exam?

- Avoid any caffeinated drinks on the day of your exam, including coffee, tea, energy drinks, or caffeinated sodas.
- Avoid energy or diet pills on the day before or the day of your exam.
- Do not use Viagra or any similar medication on the day before or the day of your exam. It is not compatible with the medications you will receive during the procedure.
- On the day of your exam, do not eat for 3 hours prior to the procedure.
- Please take all of your medications. Bring a list of all the medications you take with you to the appointment.
- Arrive 1 hour before the time of your exam.

How is the exam performed?

- You will be greeted by one of the CT Scan technologists who will be performing the exam. They will attach your finger to a machine that reads your pulse. They will ask about your medications and some medical history.
- You will be given medication that will slightly slow your heart rate. You will need to wait approximately 1 hour for this medication to take affect. Very fast heart rates will take more time.
- The technologist will establish an IV and prepare you for the exam.
- 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 CT table moves you in and out of the scanner as the exam is performed.
- The CT scan requires the use of contrast material to enhance the visibility of certain tissues. Soon after the injection of the contrast, the scan will start.
- During the scan, you will be asked to hold your breath for about 5 seconds. After that, you will be moved out of the CT room and observed for a few minutes. If you have ever had a CT scan, you will be surprised how much like a normal CT scan this exam seems. In fact, the only difference is the speed of the scanner and the heart monitor hook-up.

What will I feel during the exam?

- During the injection of contrast, you may feel a warm, flushed sensation. This feeling is normal for any contrast injection.
- The medication given to slow the heart rate has been known to cause some people to feel dizzy when they stand suddenly. The dizziness is slight and only happens rarely. Some people may get a slight headache from the nitroglycerin given before the injection.

Who interprets the results and how do I get them?

Your study is examined by a Radiologist who is a Physician specialist in interpretation of studies involving X-ray, Ultrasound and MRI. The final results will be sent to the doctor who ordered the exam. If you need the results sent to several doctors, please bring their names and addresses with you and inform the receptionist that you would like those physicians to receive a copy of the report.