What should I expect?

A technologist will escort you into the CT scanning room, where you'll see a table and a large, donut-shaped device called a gantry. The technologist will have you lie on the padded table and make sure that you're comfortable. You'll be asked to lie very still during the scan and hold your breath for a short time to minimize any body movement.

During the scan, you might hear a humming or buzzing noise, but you should not feel anything unusual. You may feel the table move while images are being taken at certain locations of your body. The specific details of your upcoming examination will be explained fully by a CT technologist, CT nurse or your physician.

How long will the exam take?

The actual scan portion of the exam takes only a few seconds. You will be asked to stay still and hold your breath as the CT scanner acquires the X-ray images of your body. Depending on the specific exam, the entire exam may take up to 45 minutes.

Do you have questions about your heart's health?

Call University Hospital's Heart Line at 706/828-2828 or toll free at 866/601-2828.

UNIVERSITY HOSPITAL

For assistance in finding a physician, call University Hospital's ASK-A-NURSE at 706/737-8423 or 800/476-7378.
www.universityhealth.org

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Cardiac CT Diagnostics

UNIVERSITY HOSPITAL

Picture your heart

The physicians at University Hospital have a lot of tools to help determine the health of your heart, ranging from the simple stethoscope to the most sophisticated technology. One of the newest tools, University's LightSpeed® VCT system, allows physicians to "take a picture" of your heart that gives them detailed information about its form and function. Using the Lightspeed VCT, University physicians can perform two key cardiac diagnostic exams, Coronary Calcium Scoring and Coronary CT Angiography.

What is a CT exam?

CT is an abbreviation for Computed Tomography, which is a non-invasive diagnostic medical exam that combines X-rays and sophisticated computers to view the inside of the body. One advantage of CT is its ability to rapidly acquire two-dimensional pictures of your anatomy. Using a computer, these 2-D images can be presented as 3-D images for in-depth clinical evaluation.

What is the difference in a regular CT scanner and the 64-slice?

University Hospital's LightSpeed® VCT 64-slice computed tomography scanner produces images of unprecedented detail in a very short time and with lower radiation dosage for patients. For example the 64-slice scanner can gather a high-resolution image of the brain, lungs or heart in about five seconds.

Coronary Calcium Scoring

The 64-slice CT scanner is an excellent tool for diagnosing coronary disease in a non-invasive fashion. For example, a CT exam can be a simple, safe and quick way to determine the amount of calcium in your coronary arteries, a condition often called hardening of the arteries. As plaque builds up, arteries get narrower and the risk of a sudden heart attack can increase. A complete cardiac assessment using the LightSpeed® VCT system takes only about 15 minutes.

Scores range from zero (low risk) to 1,000 and above (high risk). Scores indicate the extent of calcification in the heart's coronary arteries, which indicates the presence of atherosclerosis or hardening of the arteries. Determining the extent of cardiac risk requires your physician to interpret your calcium score in combination with other tests and risk factors.

Coronary CT Angiography

The Coronary CTA is another non-invasive test used to determine whether fatty or calcium deposits have built up in the arteries that supply blood to your heart. The advantage of such a test is that it provides the physician with true visualization of the heart and the plaque blockages in the blood vessels. The CTA also provides excellent images of heart function, previous coronary bypass grafts, cardiac shunts and other information that allows the physician to assess your heart's health.

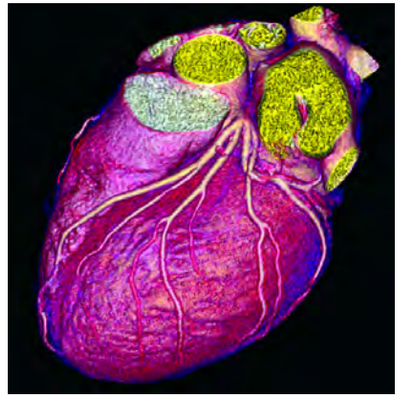
Are IVs or shots involved?

For the Coronary CTA exam, a solution called "contrast" will be administered with an IV to help visualize the coronary arteries. Before the exam, blood tests will be required to ensure proper kidney function. It also is very important to let your physician know beforehand if you've ever had an allergic reaction to contrast, or if you have any other allergies. In addition, the technologist will connect you to an EKG machine to monitor your heart.

It is important to have a complete cardiac risk assessment done prior to considering other diagnostic exams, such as the Coronary CTA. A basic risk assessment is available online at University Health Care System's Web site, www.universityhealth.org. Click on "Online Publications" and then select "AHA Risk Assessment" under Cardiovascular Services.

How safe are CT examinations?

CT is a safe and effective diagnostic procedure. In fact, nearly 50 million CT exams are performed in the U.S. every year. Like many other imaging technologies, CT has been cleared by the U.S. Food and Drug Administration. Additionally, the GE LightSpeed® VCT Scanner at University Hospital has been designed with dose reduction features that minimize your exposure to radiation.



An image of the heart from the LightSpeed® VCT Scanner.