A Cardiac CT Scan is a non-invasive way of obtaining information about the location and extent of calcified plaque in the coronary arteries - the vessels that supply blood to the heart wall. Plaque is a build-up of fat and other substances, including calcium, which can, over time, narrow the arteries or even close off blood flow to the heart. The result may be painful angina in the chest or a heart attack. A computed tomography (CT) scan is a noninvasive medical test that uses special x-ray equipment to produce multiple images or pictures of the inside of the body and a computer to join them together in cross-sectional views of the area being studied.

Because calcium is a marker of coronary artery disease, the amount of calcium detected on a Cardiac CT Scan is a helpful diagnostic tool.

Coronary artery disease (CAD), also known as coronary heart disease (CHD), is a disease in which there is a narrowing or blockage of the coronary arteries, the blood vessels that carry blood and oxygen to the heart. CAD is usually caused by a build up of fatty material and plaque inside the coronary arteries, called atherosclerosis. The disease may cause chest pain, shortness of breath during exercise and heart attacks. The risk of CAD is increased by having a family history of CAD before age 50, older age, smoking tobacco, high blood pressure, high cholesterol, diabetes, lack of exercise, and obesity.

Cardiac CT Scans are performed in the following location; please contact us for more information or to schedule an appointment:

St. Joseph's Ambulatory Imaging Center, Clifton: 973.569.6300

When should I consider Cardiac CT Scan?

A prescription from a physician is required for an CT exam. You may need pre-authorization from your insurance company. Consult with your physician before scheduling your appointment. Call the above location to schedule an appointment.

To assist us with scheduling a patient, please have the following information available when you call:

- Patient name and phone number
- Indication(s) for the exam
- Referring Physician name and phone number
- Insurance Information

How do I schedule Cardiac CT Scan?

A prescription from a physician is required for an CT exam. You may need pre-authorization from your insurance company. Consult with your physician before scheduling your appointment. Call the St. Joseph's Ambulatory Imaging Center, Clifton: 973.569.6300, to schedule an appointment.

To assist us with scheduling a patient, please have the following information available when you call:

- Patient name and phone number
- Indication(s) for the exam
- Referring Physician name and phone number
- Insurance Information

What should I expect BEFORE my Cardiac CT Scan?

The image quality of Cardiac CT examinations is highly dependant on the patient's heart rate during the scan. The desired heart rate is ~60bpm. Therefore the cardiac imaging physician may administer a beta-blocker prior to the examination.

Please inform the cardiac imager of any known contraindications to the use of beta-blockers when ordering the exam. In patients with known high heart rates, the administration of an oral beta-blocker the evening prior to and the morning of the exam may be very helpful. Referring physicians may consider prescribing an oral beta-blocker if a patient has a high heart rate.

On the day of the exam;

- Please do not consume any caffeinated beverages or food (coffee, caffeinated sodas, chocolate etc),
- Do not eat food within the last 4 hours prior to the exam,
- You may take any medication that you usually take,
- You may drink clear non-caffeinated liquids until you arrive at the scanner,
- We ask you to arrive 60 minutes prior to your appointment time,
- We will also ask you a series of questions that will determine whether or not it is safe for you to undergo the CT. Your early arrival will help to ensure that we are able to perform the test efficiently and safely.

What should I expect DURING my Cardiac CT Scan?

Prior to the CT exam, an intravenous catheter will be inserted in your arm for intravenous contrast injection. If you have a known contrast allergy or had a reaction to contrast dye, please tell your physician and CT technologist prior to the exam. Electrocardiogram leads will be placed in order to monitor your heartbeat. Before beginning the Cardiac CT exam, you will be coached in a method to hold your breath. You will be asked to hold your breath a few times for 12-18 seconds.

Just before the CT exam, you may be given a beta-blocker, a medication to slow down the heart rate.

The CT exam itself lasts only 10-15 minutes.

If you are taking metformin (Glucophage), you must discontinue the use of metformin for 48 hours after the procedure and reinstated only after renal function has been re-evaluated by your physician and found to be normal.

What should I expect AFTER my Cardiac CT Scan?

You will have no restrictions after the exam and can return to normal activities.

Typically, the results of any examination will be available to your doctor within 24 hours. Your doctor will communicate the results of your study directly to you.

Additional Information about Our Service

The Division of Cardiovascular Imaging & Intervention provides a full range of diagnostic and image-guided interventional studies of the vascular system. This Division consists of nine full-time radiologists, all of whom are Board-certified in general radiology and fellowship trained with additional specialization in vascular procedures. In addition, each has extensive training in the use of x-ray equipment, x-ray dye and image interpretation. The Mass General Clinical Cardiac CT Service utilizes state-of-the-art 64 slice multi-detector row CT scanners.

Our Cardiovascular imaging radiologists who specialize in interpreting Cardiac CT are Level III certified by the American College of Cardiology:

Frank Yuppa, MD

Edward Milman, MD