

What is a CT Scan?



The Computer Tomography otherwise known as a CT, has revolutionized medicine as it allows physicians today to detect diseases that, in the past, could often only be found during surgery or an autopsy. A noninvasive, safe, and well-tolerated procedure. It provides a highly-detailed look at many different parts of the body for the effective diagnosis and treatment of disease and medical conditions.

At JFK Medical Center, we are equipped with 64 slice CT scanners, which perform the same task of a standard CT in just a few seconds, producing a higher-resolution image of the heart, brain or lungs. Most commonly used to detect and evaluate heart conditions, the speed of the 64 slice CT serves as an alternative to conventional angiography or cardiac catheterization.

What is a CT Scan?

A sophisticated diagnostic device, the CT uses a rotating x-ray device to create detailed, cross-sectional images of internal anatomy from different angles. A computer reconstructs these "slices" to produce three dimensional images called tomograms. A non-invasive procedure, a CT scan obtains images of body parts that cannot be detected with the use of a traditional X-ray.

What Can I Expect During a CT Scan?

A CT scan is typically performed in an outpatient setting. The imaging machine resembles a large, square doughnut whereby the patient lies on a table, which slides into the circular opening and moves forward and backward to accurately position the patient for imaging. The CT scanner is a circular, rotating frame with x-ray tube detectors mounted 360 degrees around. With each complete rotation of the scanner, a cross-section of the body part in question is acquired. The procedure is performed by a certified radiology technician who will ask the patient to hold his/her breath for a few seconds at a time so that the scanner can collect the targeted data set. A complete scan typically takes anywhere from 5 to 15 minutes to complete. During the process, the patient will be able to communicate with the technician via an intercom system.

When is it most appropriate to use a CT Scan for Diagnosis?

A superior diagnostic tool for the brain, chest, abdomen, pelvis, spine, sinus and vascular imaging, CT scans are frequently used to detect and evaluate diverse abnormalities of the body, including the brain, neck, spine, chest abdomen, pelvis, and sinuses. A CT has the ability to image a combination of soft tissue, bone, and blood vessels, making it possible to detect diseases earlier than with a regular x-ray. As such, it can obtain an accurate and earlier diagnosis, resulting in greater success of treatment of many diseases.

What should I do to prepare for the procedure?

On the day of your procedure, the patient must refrain from eating solid food for three hours prior to the appointment, if needed. However, a moderate amount of clear liquids is acceptable. There is generally no other special preparation required. A patient should wear comfortable, loose clothing and such things as earrings, glasses, dentures, and belts should be removed so not to compromise the image. In some cases, a patient may be asked to wear a hospital gown. In some cases, the CT procedure may require that the patient take orally or via injection a contrast agent to enhance the images of the organs and/or blood vessels being studied. As the contrast agent contains iodine, it is important for the patient to notify the nurse or technician if he/she is allergic to iodine.

How safe is a CT?

A patient will be exposed to radiation when undergoing a CT. However, it is a safe level. Equally, the contrast agents are considered safe and side effects are uncommon. A CT scan is not done during a pregnancy. If you are pregnant, speak with your doctor regarding alternative options for diagnosis.

For additional information, please call **732.321.7000 ext. 61438**.
For on-line scheduling of an X-ray, please **888.535.6762**.