

# CT (Computed Tomography)

**CT (Computed Tomography)** is a valuable diagnostic medical exam that combines X-rays and computers. Often called CAT scans, CT scans have been performed successfully for almost thirty years.

A CT scan gives the radiologist a non-surgical way to see inside your 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 evaluations. CT scans create high-definition pictures of both bony structures and soft tissue, as well as, clear images of organs such as the brain, muscles, joints, veins and arteries.

## Reasons for a CT Exam

CT exams may be prescribed when people are ill or injured, or when a doctor suspects a medical problem that cannot be detected easily with a routine physical examination. CT may also be used to rapidly obtain specific diagnostic information that hasn't been provided by other imaging technologies, such as ultrasound, traditional X-ray and magnetic resonance imaging (MRI). If you have any questions concerning your exam, please ask your physician or the radiology technologist for input

## What Should I Expect?

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

During the scan you might hear a humming noise. You may notice the table moving while images are being taken at certain locations of your body. The technologist can monitor you during the entire exam through a window and will talk to you through an intercom.

The specific details of your examination will be explained fully by a CT technologist or your physician.

## **How Long Will the Exam Take?**

The actual scan, which acquires X-ray images of your body, takes only a few seconds. However, the rest of the CT exam takes longer as the images are processed on the computer. Depending on the specific exam, you may have to hold still for a few seconds during the X-ray portion. An average CT study takes approximately 10-20 minutes depending on the circumstances.

## **Are IVs or Shots Involved?**

Depending on the exam, a solution called "contrast" may be administered with an IV to help improve the accuracy of the examination. It is very important to let your doctor know beforehand if you've ever had an allergic reaction to contrast, or if you have any other allergies, especially to iodine-based products or shellfish.

## **After the Exam**

The radiologist will carefully analyze your CT images, review the findings with your physician, and provide a report. Your physician will then discuss the results with you.

## **The Safety of CT Examinations**

Like many other radiology imaging technologies, CT has been cleared by the U.S. Food and Drug Administration. CT is a safe and effective diagnostic procedure. In fact, millions of CT exams are performed in the U.S. every year.

**Information and images provided by GE Healthcare, [www.gehealthcare.com](http://www.gehealthcare.com).**