

CT SCAN

Computed axial tomography, also known as CAT scan or CT scan, is an imaging technique that is a widely regarded tool for evaluating the genitourinary tract. CT scanning combines X-rays and computer calculations to produce precisely detailed cross-sectional slices of images of the body's tissues and organs. More specifically, very small, controlled beams of X-rays, rotating in a continuous 360-degree motion around the patient, pass through the tissue as an array of detectors measure thousands of X-ray images or profiles. Computer calculations based on those multiple measures produce the detailed pictures reflected on a screen. These images can be stored, viewed on a monitor or printed on film. In addition, stacking the "slices" of images can also create three-dimensional images of the body's internal structures.

Since CT scans can distinguish between solid and liquid, it is extremely valuable in examining the type and extent of kidney tumors or other masses, such as stones or cysts, distorting the urinary tract. CT technology, however, is also enhanced by other factors. Intravenous injections of contrast agent (dye) intensify the images. CT scans have improved speed and accuracy by gathering volumes of continuous kidney and urinary data in seconds with no gaps between images.

Risks and Potential Complications

CT scanning is a safe, efficient and effective technology that produces minimal risks. The major risk involves a reaction to any iodine-based dye that may be used. Minor reactions to the dye may include hot flashes, nausea and vomiting, which are usually treated successfully with antihistamines. In very rare circumstances, more severe complications — breathing difficulties, low blood pressure, swelling of the mouth or throat and even cardiac arrest — can occur.

There is relatively low radiation exposure during this test. However, a patient who is or may be pregnant should notify their physician prior to this examination as a fetus is susceptible to the risks associated with radiation.

Instruction for CT Scan

Dietary — Do **NOT** eat or drink anything for at least **6 (six) hours** before your scheduled appointment. If you are scheduled for a surgical or diagnostic procedure for which you will be receiving anesthesia do **NOT** eat or drink anything after **midnight**. You may continue to take your regular medications with a small amount of water, as long as you take them before you start your CT drinks.

Anaphylaxis Prophylaxis — Take 2 (two) **Prednisone** 25 mg tablets at bedtime the evening before and take 2 (two) **Prednisone** 25 mg tablets the morning of your scheduled appointment.

Contrast — Drink one bottle of Cheetah prep **2 (two)** hours before your scheduled appointment. Drink one bottle of Cheetah prep **1 (one)** hour before your scheduled appointment.

What Happens During a CT Scan

A technologist will call for you, and you will be interviewed about your medical condition, and especially your allergy history. You may also be asked questions about your preparation. If you are diabetic and are taking any form of metformin (Glucophage, Glucovance, Avandamet, or Metaglip) please inform the technologist and physician. You will need to be off of these medications the day of the CT Scan and two days after.

The test is performed in a radiology department by a technician under the supervision of a physician. You will be asked to lie in a certain position on a narrow table that slides into the center of the scanner. Dye may also be administered into a vein in your hand or arm. The technician will issue instructions to you regarding body position and breathing during this test. Upon test completion, you can resume your normal daily activities.