Computerized Tomography (CT) Scan

A computerized tomography (CT) scan is a diagnostic test. It uses an x-ray machine and a computer to create pictures of the body. 3-D images can also be seen. It is used to detect diseased or abnormal organ structure.

**Preparation/Diet**

**Before your CT Appointment:**
- Do not eat three hours before your check-in time/prep-time
- Drink at least three to four cups (16.9 to 33.8 ounces) of water or clear juice before your CT scan
- Unless otherwise instructed, you may have fluids
- If you have a PEG/nasogastric feeding tube, you must stop your feedings three hours before your check-in time.

Take your medicines as usual unless otherwise instructed. Bring all of your prescription and non-prescription medicines in their original, labeled bottles. This includes vitamins, nutritional supplements, herbal products and over-the-counter drugs.

Intravenous (IV) contrast (dye) is often used with CT scans. Blood tests (BUN, Creatinine) should be completed at least two hours before your CT exam. If your blood tests were done within the last month by an outside facility, bring the results with you to your appointment. If you are currently receiving chemotherapy, your blood tests and results must be completed within 48 hours after receiving your chemotherapy. Arriving without blood test results may delay your CT appointment.

**Precautions**

Tell the CT staff if you:
- are allergic to contrast media, iodine or any other allergies
- have been pre-medicated or need to be pre-medicated for a known contrast allergy
- are diabetic and take:
  - insulin
  - metformin (Glucophage®, Glucovance®, Metaglip®, Avandamet® or Fontamet®)
- are fasting for any other tests
- are pregnant or breastfeeding
• have fluid restrictions due to kidney or heart conditions
• have received or will be receiving a radioactive iodine isotope (I-131)
• have a PEG/nasogastric feeding tube in place
• weigh more than 400 pounds (136.2 kilograms)
• have a metal tracheostomy tube (your metal one will be replaced with a plastic one in the Head and Neck Center before your CT scan)
• have problems with constipation.

For patients having a CT scan of the abdomen or pelvis with oral contrast: On the day of your CT scan, if you are scheduled for any of the following tests, you will need to have them before your CT scan:
• hip x-ray
• bone density test
• bone survey
• abdominal series
• colonoscopy
• any procedure that requires sedation or anesthesia.

If you are scheduled for an upper GI (barium swallow), you will need to have it after your CT scan.

You will be asked to drink oral contrast over a 60 to 90 minute period. Oral contrast allows your intestines and digestive system to be more visible on the CT scan.

Tell a staff member if you have had any of the following tests within the past five to 10 days:
• barium enema
• upper GI series
• radiation simulation test
• CT scan

If barium was used during your previous tests you will need to take a laxative. It will help to clear your body of the barium. On the day of your CT scan, you will have an x-ray to make sure there is no barium in your intestines.

Procedure

The total amount of time for your CT scan, including preparation, is about two to three hours.

If oral contrast media is used for your CT scan, you will drink barium at set times. IV contrast media is used alone or in addition to the oral contrast media.

If an IV contrast media is required, an IV needle will be placed into a vein in your arm. An IV will need to be placed if one has not been started.

If you are having a CT scan of your pelvis, you may receive a rectal contrast enema in addition to oral and IV contrast media.
On the day of your CT scan, report to the location listed in you myMDA account. Sign in with the receptionist at the front desk. Please arrive at your scheduled check-in time to avoid delays.

Do not bring jewelry or other valuables. Bring only the amount of money you will need for the day. MD Anderson is not responsible for any lost valuables. You will receive a locker and a key to store your personal items.

You will be taken to a dressing room and change into a hospital gown or scrubs. A staff member will escort you to the imaging area.

Instructions for the CT scan:
- You will lie on a padded table
- You will be positioned for the CT scan.
- Once you are in position, do not move. Movement can cause the image to blur.
- A staff member will be in a booth next door. You may speak with the staff through an intercom. You will be asked to hold your breath at different times during the procedure.
- CT scans take about five to 30 minutes.

Follow-up Care

Within six hours after the procedure, drink three to four cups (500 mL to one liter) of water or juice. The liquids help remove the contrast media from your body. If you are unable to get rid of the barium within 24 hours, call your primary clinic.

Barium may cause bowel problems. If you feel constipated, you may take an over-the-counter laxative.

Do not take Metformin (Glucophage®, Glucovance®, Metaglip®, Avandamet® or Fontamet®) for 48 hours after your IV contrast was administered. Ask your nurse for the handout ‘Discharge Instructions for Patients on Metformin’.

If you have any questions or concerns after the procedure, call:

**Mays Clinic**  
**CT Imaging**  
Floor 7, near Elevator T  
Monday through Thursday, 7 a.m. to 11 p.m. and Friday 7 a.m. to 7 p.m.  
713-563-6621

**Main Building**  
**Diagnostic Imaging - C**  
Floor 3, near The Gazebo  
Monday through Thursday, 7 a.m. to 11 p.m. and Friday 7 a.m. to 7 p.m.  
713-794-4114 or 713-792-3601

**Diagnostic Imaging – D**  
Floor 3, near Elevator F  
24 hours
Emergency Center  
Floor 1, near Elevator E  
24 hours every day  
713-792-3722

Radiology Outpatient Center  
1700 Holcombe Blvd.  
Houston, TX 77030  
713-794-5860

If you are not in the Houston area and have questions or concerns, call your local doctor or go to the nearest hospital emergency center.

Resource

To view video visit the following website:  
https://www.youtube.com/watch?v=UQrvGpBiUfI