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 certain diseases or problems with the organs of the body.

Preparation/Diet

⚠️ Before your CT appointment:
- Do not eat 3 hours before your check-in time/prep-time.
- Drink 4 cups (1,000 mL) of water or clear fluids before your CT scan.
- Unless otherwise instructed, you may have clear fluids.
- If you have a PEG or nasogastric feeding tube, you must stop your feedings 3 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 (contrast media) is often used with CT scans. Blood tests (BUN, Creatinine) should be completed at least 2 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 or nasogastric feeding tube in place
- Weigh more than 400 pounds (136.2 kilograms)
- Have a metal tracheostomy tube (your metal tube 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 media over a 60 to 90 minute period. Oral contrast media 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 5 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 2 to 3 hours.

If oral contrast media is used for your CT scan, you will drink barium at set times. IV contrast media may be 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 an enema containing contrast media in addition to oral and IV contrast media.

On the day of your CT scan, report to the location listed in your MyChart account. Sign in with the receptionist at the front desk. 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 CT 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 images 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 5 to 30 minutes.

Follow-up Care

Within 6 hours after the procedure, drink 4 cups (1,000 mL) of water or clear fluids. 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 media 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 3 p.m.
713-563-6621

**Main Building**
Main CT Clark
Floor 3, near Elevator A
Monday through Thursday, 7 a.m. to 11 p.m. and Friday 7 a.m. to 5 p.m.
713-794-4114

**Diagnostic Imaging – D**
Floor 3, near Elevator F
24 hours