Computed Tomography Scan

A computed tomography (CT) scan is a special way of looking inside your body using X-ray images and computer processing. The images produced are cross-sectional images taken from different angles around your body, much like slices taken out of a loaf of bread. The length of the test will depend upon the area to be scanned and the information your physician needs. You will have the CT scan in the Department of Radiology.

Please tell your physician, nurse or CT technician (tech) if you:
- Are pregnant, might be pregnant or are trying to get pregnant
- Are allergic to contrast dye
- Have kidney disease or are being treated with dialysis
- Have had a barium study within the last 5 days
- Have had a problem with this test (or other contrast tests) in the past

Preparing for the test

If you are allergic to contrast dye, your clinician will give you special medication instructions. It is important that you follow these instructions carefully.

Other preparations for the CT scan will depend on the area of your body that will be scanned. Your physician will tell you what you need to do to prepare. This may include:
- Pregnancy testing
- Diet restrictions
- Drinking fluids
- Taking laxatives or bowel preparations before the test

Before the test

If you are coming to the hospital from home, the care team will take you to the dressing area and ask you to change into a hospital gown. You will need to remove any loose or hanging jewelry, such as necklaces and some earrings. You can usually keep wearing a ring or watch, but you may want to take them off for comfort and security.

For CT scans of some areas of your body, the care team will ask you to drink a CT contrast liquid. This contrast liquid will outline your stomach and bowel on the images. It will make certain parts of your body appear bright on the images. This step is important for clear results. If you have any stomach upset or diarrhea, please tell the CT scan tech.
Sometimes you may need a contrast dye injected into your vein during the scan. If so, the care team will put an IV (into the vein) line in your hand or arm before the CT scan starts. The care team may take a blood sample when they start the IV line to check your kidney function, if needed.

**During the test**

Before the test starts, the CT scan tech will explain the test and the equipment they will use. They will help you lie on a table connected to the CT scan machine. The tech will line up the part of your body to be scanned. The table will then move so you are in the center of the machine. The tech will be able to see and talk with you throughout the test by intercom.

When the scan starts, it is very important that you lie still and follow the instructions of the tech and physician. The tech may ask you to hold your breath several times during the test.

If needed, a physician, nurse or tech will inject the contrast dye. You may feel warm and flushed or feel the urge to urinate when they inject the dye. You may also notice a metallic taste in your mouth. These are normal effects of the contrast dye, although most people will notice nothing at all. Please tell the CT scan tech right away if you have any of these symptoms:

- Shortness of breath
- Hives
- Itching

**After the test**

You may go back to your normal activities and diet after the test. If you had contrast liquid or dye during the test, drink an extra 1 or 2 glasses of water after the test to help flush the contrast out of your system. The contrast will not discolor your urine. Although it is rare to have any delayed allergic reactions, contact your physician if you get a rash or notice any swelling.

If you drank the contrast liquid, you may notice a change in the color and frequency of your bowel movements. If any changes last more than 2 to 3 days, please contact your physician.

If you have any questions or concerns about this test, please ask your physician, nurse or CT scan tech.

**Radiation safety**

CT scans use radiation to produce images needed for diagnosis and treatment. There are risks to radiation exposure. It is important to talk with your physician before having the scan to learn about:

- Risks and benefits of the scan
- Why you need the scan
We are committed to your safety. This means that we will use the least amount of radiation needed for the CT without reducing the quality of the test.

The Northwestern Medicine CT Department is proud to be accredited by the American College of Radiology. This accreditation makes sure that:

- We have undergone a thorough review process.
- Our staff is well qualified, through education and certification, to perform and interpret your test results.
- Our equipment passes inspection for the test or treatment you need.
- We meet or exceed national quality and safety guidelines.