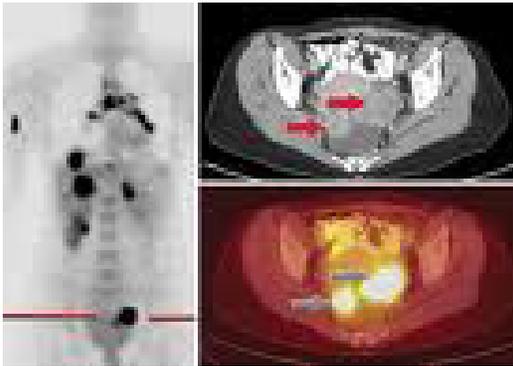


What is PET/CT? (Positron Emission Tomography)



PET/CT is a molecular imaging procedure that combines functional imaging with CT imaging to produce very detailed images. The combined PET/CT scans provide images that pinpoint the location of increased metabolic activity within the body. Metabolic activity refers to the chemical reactions that take place within the human body. PET/CT can be used to locate overactive cancer cells in the body, to determine if cancer has spread in the body, and /or to evaluate the body's response to treatment.

What will the test tell me?

PET/CT imaging can help your doctor to determine if cancer has spread to different locations in the body or if selected treatments are successful.

Who will perform the test? And where will the test be done?

Your PET/CT scan will be done at Regional Cancer Care in the Thunder Bay Regional Health Sciences Centre. A registered technologist will perform the scan.

How do I prepare for the test?

You must have nothing to eat or drink other than water for 4 hours prior to the test. Try to minimize physical activity for 24 hours (for example, going for a walk is fine, but don't go to the gym or run 5K). Please bring a complete list of your present medications.

What will happen during the test?

FDG, a marker composed mostly of sugar will be injected into a vein in your arm or hand through an IV. It will take approximately 60 minutes for the marker to be taken up in your cells. You may be asked to drink some contrast material that will travel to the intestines and help the doctor interpreting the study. During the 1 hour uptake period, you will rest quietly in a recliner chair with a warm blanket. You will then be moved into the PET/CT scanner and the imaging will begin. You will lie down on an examination bed that slides in and out of the scanner. You will need to remain still during imaging. The CT exam will be done first, followed by the PET scan. On occasion, a second CT scan with intravenous contrast will follow the PET scan. You may breathe normally for the entire scan. You may be asked to change into a hospital gown depending on your clothing. You will be asked to void immediately before the scan takes place.

The CT scanning takes less than two minutes. The PET scan takes 20-30 minutes. Expect your appointment to last 2 hours.

Will the test be painful?

PET/CT scans are painless. You may feel some discomfort when the IV is inserted. The FDG marker injection may feel cool when given through the IV. As you will have to lie still for a long period of time you may experience some cramping or stiffness but pillows and blankets are offered to increase your comfort.

Are there any side effects to the test?

PET/CT scan risks are similar to the risks of your regular CT scan. You are exposed to small amounts of radiation throughout the procedure. Doctors and scientist believe that PET/ CT scans provide valuable information that outweighs any risks.

What will happen after the test?

When the examination is completed, you may be asked to wait until the technologist checks the images in case additional images are needed. Occasionally, more images are obtained of certain areas or structures. The need for additional images does not necessarily mean there was a problem with the exam or that something abnormal was found, and should not be a cause of concern for you. Once your scan is over you may return home and to normal activity.

When will I know the results of the test?

A report will be sent to your doctor and they will discuss the results with you at your next visit.

