



What you should know before having a PET/CT

What is a PET/CT?

The PET/CT scanner is a combination between a Computerized Tomography scanner (CT) and a Positron Emissions Tomography scanner (PET). This state-of-the-art device collects both anatomical details and metabolic processes in a single non-invasive procedure. Therefore, you do not have to undergo two separate scans, as previously was the case. The scanner has been in use for several years now and is continuing to gain popularity in the medical field. Its accuracy and clarity are by far superior to prior medical imaging equipment.

How can a PET/CT help me?

Because it combines both functional and anatomical information into one single scan, your doctor will be able to pinpoint the exact location of interest and determine its functional status. The results could also help determine the best type of treatment for you. One of the most important factors in the fight against cancer is early detection. Therefore, by having a PET/CT scan, you are providing your doctor with information that may help to specify and improve any treatment that you require.

What is FDG?

FDG is a low dose radioactively labeled sugar solution that will be injected into your body on the day of your scan. During the following hour and a half, the tracer will distribute itself throughout your body. Certain organs, such as your heart, brain, and bladder, normally use sugar for energy more than other organs. Aside from those organs, many cancerous tumors also absorb this sugar solution. The PET/CT scan will determine where these tumors are located and whether or not they are of interest. Over the next few hours after the scan, the tracer will gradually travel through your body and leave through your bladder.

How should I prepare for my scan?

In order for the PET/CT to be successful, you should **not eat or drink anything** except water (NO Flavored water) after midnight of the night before your scan. You may take any prescribed medication with a small amount of water unless instructed not to do so. Wear comfortable clothing, preferably without zippers or buttons. You will be asked to remove any metallic objects once you arrive for your scan.

What happens during the PET/CT scan?

After receiving the FDG injection and waiting a hour and a half, you will lie down on the scanner bed. The only discomfort you may experience during the scan is that you must keep your arms up above your head. The first part of the scan is performed by the CT scanner, during which the bed will move continuously for approximately thirty seconds. You will hear very little noise coming from the scanner at this point. After the CT is complete, the PET portion will begin. This scan will take a total of 18-30 minutes.

When will I find out the results of my PET/CT scan?

The information collected from the scan will be given to your physician. He or she will then discuss the results with you.

If you have any questions, please call University of Tennessee PET/CT department at (865) 544-6301.