PET/CT

Positron Emission Tomography (PET) and Computerized Tomography (CT) are used to fuse the metabolism of the area being evaluated with internal anatomy together to obtain a more precise location of cancer cells. This tool is used to help make treatment recommendations more accurate. Alone both of these imaging modalities have benefits and limitations associated, but together they provide complete information on cancer location and activity. PET/CT scanning combines two technologies into one machine, making it possible to have one exam and have more detailed results.

PET/CT applications

- These images can help determine the extent of disease
- Gives exact location of disease for biopsy, surgery or treatment plan
- Evaluates how well the body is responding to treatment
- Detects remnants or reoccurring disease
- Provides earlier diagnosis

Why do I need this exam?

Your PET exam results may have a major impact on your physician's diagnosis of a potential health problem ? and, should a disease be detected, how your return to health is managed.

A PET study not only helps your physician diagnose a problem; it also helps your physician predict the likely outcome of various therapeutic alternatives, pinpoint the best approach to treatment, and monitor your progress. If you're not responding as well as expected, you can be switched to a more effective therapy immediately.

Just ask your physician what he or she hopes to learn from your PET exam.

What happens when I get there?

After reviewing your history and any prior exam, you'll receive a radiopharmaceutical injection. This is a

radioactive tracer that must pass multiple quality control measures before it is used for any patient injection.

For most studies, you'll have to wait for the radiopharmaceutical to distribute itself ? typically from 30 minutes to an hour. You may be able to read, speak or listen to music until your scan begins ? and perhaps during the scan itself. However, if your brain is being scanned, you will be asked to wait in a quiet, dimly lit room, without stimulating your brain by reading or talking.

If you're having a heart study, on the other hand, you may not have to wait at all; the radiopharmaceuticals used for cardiac exams are often administered just before scanning begins. Positron Emission Tomography (PET) and Computerized Tomography (CT) are used to fuse the metabolism of the area being evaluated with internal anatomy together to obtain a more precise location of cancer cells. This tool is used to help make treatment recommendations more accurate. Alone both of these imaging modalities have benefits and limitations associated, but together they provide complete information on cancer location and activity.

What will the scan be like?

When you're ready for scanning, you'll lie on a comfortable table that moves slowly through the ring-like PET scanner as it acquires the information it needs to generate diagnostic images. You will be asked to lie very still, because movement can interfere with the results.

You shouldn't feel a thing during the scan, which can last anywhere from 15-60 minutes. Then, unless the physician sees a need for acquiring additional information, you will be free to leave.

How long will all this take?

Your exam will vary depending on what your physician is looking for, and what is discovered along the way. Expect to spend two to three hours getting your PET exam.

What happens after the exam?

You may leave as soon as the scan is complete. Unless you've received special instructions, you'll be able to eat and drink immediately ? drinking lots of fluids will help remove any of the radiopharmaceutical

that may still be in your system.

In the meantime, your results will be prepared for review and the findings forwarded to your physician, who will tell you what has been learned.

For information about PET/CT reimbursement for Medicare, see this document provided by the National Radiology Data Registry. Cancers and Indications Eligible for Entry in the NOPR

Information provided by GE Healthcare, www.gehealthcare.com.