

## What is a PET/CT and How Does it Work?

- A Positron Emission Tomography/Computed Tomography scan known as a PET/CT scan is an advanced imaging test that detects biochemical abnormalities in your body. A radioactive drug containing glucose, called FDG (tracer), is injected into a vein in either your arm or hand and is absorbed by your tissues and organs. The PET detects the radioactivity emitted by FDG, and the CT provides fine anatomical detail so that the combined PET/CT allows for early and highly accurate detection of disease.

## Patient Safety Tips Prior to the Exam

- Please let us know if you have any allergies or adverse reactions to any medications.
- If you are pregnant or may be pregnant, please inform your doctor and the technologist.

## Preparation for the Procedure

- Arrive at least 15 minutes prior to your PET/CT scan.
- Please bring a government issued photo identification and your insurance card.
- Please leave your valuables and jewelry at home.
- You will be asked to follow a low carbohydrate diet for the previous 24 hours before the date of your appointment.
  - Foods that CAN be eaten include: meat, hard cheese, tofu, eggs, butter and vegetable with no starch.
  - Some foods that are NOT allowed include; cereal, pasta, milk, breads, and other sugars.
  - If you are scheduled in the late afternoon and can eat breakfast before the exam, it must be a low carbohydrate diet as well.
- Do not eat or drink anything, except for water 6 hours before the exam. You may drink water until arrival. Drinking extra water the evening before and the morning of the exam is helpful in obtaining a vein for needle placement. Please refrain from chewing gum or sucking on candy or lozenges.
- Take all of your prescribed medications as usual on the day of your exam unless you are instructed not to do so.
- If you are diabetic please ask the PET/CT center staff for instructions.
- Do not exercise for 24 hours prior to your exam.
- Wear comfortable, loose fitting clothing and avoid wearing clothing with metal such as belt buckles and snaps.
- If you are claustrophobic please discuss options for medications with your referring physician. Bring those medications with you and take when you are instructed by the nurse. If you plan on taking any medications to lessen anxiety or discomfort, you must make arrangements for someone to drive you home after the exam, to ensure your safety.
- If breast feeding please express milk prior to the injection and wait 24 hours after the exam is completed before resuming.

## During the Exam

- The duration of the exam will vary, but you will be at the PET center for approximately 2 hours in total time.
- At the beginning of the PET/CT scan procedure we will obtain a blood glucose level. If this level is acceptable you will receive an injection of a small amount of a radioactive material called FDG. We will use a vein in your arm or hand to inject the FDG.
- You may be given an intravenous injection of iodine contrast media sometimes called “dye” that enhances your CT images.
- You may be given a diluted barium contrast to drink to enhance your CT images.
- After the injection you will be asked to sit quietly for approximately one hour within one of our quiet rooms.
- Due to the radioactive nature of the FDG tracer pregnant women and children are not allowed to stay with you in the quiet rooms.
- After you have relaxed you will be asked to lie down on a table which will move you through the PET/CT scanner. This machine has a larger opening than an MRI, and it does not make any loud noises. The time in the scanner will vary between 20 and 40 minutes, depending on what your physician has requested.
- You will have the opportunity to ask the technologist questions.
- Side effects are rare during this procedure. However, if you feel any symptoms such as nasal congestion, itchy eyes or throat, hives, rashes, sneezing, restlessness, tremor, pain, nausea, vomiting or dizziness, please notify the staff immediately.

## After the Procedure

- You may leave us as soon as the exam is completed by the technologist. Unless you have received special instructions you will be able to eat and drink immediately. Drink plenty of fluids to hasten the excretion of the FDG that may be in your system.
- Nursing mothers should wait 24 hours before resuming breast-feeding.

Since the tracer will remain radioactive for about twelve hours, to minimize radiation exposure please follow these suggestions for twelve hours following the beginning of the scan:

- Avoid prolonged close contact with children and pregnant women.
- Keep a distance of about 6 feet from infants, small children and pregnant women.
- Your PET/CT will be interpreted by a radiologist and a report will be sent to your physician. Please contact your physician for results of your PET/CT.

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## Your Appointment

Your appointment at the PET Center is on \_\_\_/\_\_\_/\_\_\_ at \_\_\_ AM / PM

Please arrive at least 15 minutes prior to this time to check in and fill out paperwork.