PET/CT scan

PATIENT INFORMATION - What You Need to Know

DESCRIPTION OF EXAM

A PET/CT scan is a hybrid Nuclear Medicine and CT imaging procedure that allows a radiologist to evaluate the presence and staging of cancer. It is also less commonly used to determine the source of infection.

PREPARING FOR YOUR EXAM - What to do before your exam:

Non-Diabetic patients:

- Fasting/NPO (no food or drink except for water) for 5 hours prior to injection (appointment start time) with no parenteral nutrition.
- Oral/intravenous fluids containing sugar (insulin or dextrose) must be stopped 5 hours before injection.
- No candy, mints, gum, or over-the-counter medicines containing sugar. Even “sugar-free” items may contain traces of sugar.
- Strenuous activity should be avoided for 24 hours prior to FDG injection.
- Low-carbohydrate meals are recommended for 24 hours prior to FDG injection. AN Examples can be found at [https://www.dietdoctor.com/low-carb/foods#foodlist](https://www.dietdoctor.com/low-carb/foods#foodlist)
- No caffeine, alcohol, or nicotine 12 hours prior to FDG injection is encouraged.
- Increasing oral hydration (plain water ONLY) for 2 hours prior to appointment is encouraged.
- Prescription medications should be taken as directed (unless injectable insulin).

Diabetic patients:

- PET scan should be scheduled early in the morning (if possible) as this is the time that most diabetic patients have the lowest glucose level.
- Diabetic patients should take their usual insulin the day before. After midnight, patients should fast (no food or drink except for water).
- A low-carbohydrate diet the evening prior to the PET/CT may improve glycemic control. Examples can be found at [https://www.dietdoctor.com/low-carb/foods#foodlist](https://www.dietdoctor.com/low-carb/foods#foodlist)
- Oral diabetic medications can be taken as prescribed (see prior comments on insulin).
- On the morning on the PET scan, hold all insulin, if injection is scheduled in the morning.
- If the patient is on an insulin pump, it is preferred that it is turned off 4 hours prior to the study, but if unable to, the setting should be on the night/basal setting during the PET scan. After the PET scan, settings can be adjusted as prescribed. (Please do not adjust these setting without consulting your ordering provider)
- After completion of the PET scan, patients are encouraged to eat a meal immediately.

Claustrophobic patients:

- Can take medication before the exam if provided to them by their referring
physician but we ask that the patient should wait until till they get into the injection room before taking medication. Patient will need someone to drive them home after the exam.

DURING THE EXAM

The patient will be taken into a private injection room. The technologist will give the patient a finger stick to check their blood sugar level. The patient will then receive a radioactive injection. The patient will wait 1hr in the private room for the injection to circulate. It is not recommended that a family member or friend wait with you for the hour due to the patient being radioactive. Exceptions are made for children and the handicapped. While the patient is waiting the technologist will give them Barium contrast to drink. After the hour the technologist will bring the patient to the restroom to change any metal clothing (including bra if metal clips are present) and empty their bladder. The patient then lies on the camera and is positioned. Depending on the patient and area of interest, the patient can lie with arms behind head or arms by their sides. The camera looks similar to a CT scanner. The first 2 minutes of the scan a quick CT is performed. The table will move in and out of the circular tube 3-4 times. Once the CT is completed it will move onto the PET portion. The patient will move though the tube again in slow increments. Scan time ranges from 25 minutes to 35mins, and during that time the patient needs to hold perfectly still. After the exam the patient will be taken back to the bathroom and can change back into their regular clothes and bra. The whole length of the exam from injection to end of scan is about 1.5-2 hours.

AFTER YOUR EXAM

Drink plenty of fluids after your exam to help wash out the radioactive tracer from the body more quickly. There are no side effects from the radioactive tracer. The amount of radioactivity you receive is very small amount and is not harmful to you or anyone else. If breastfeeding, it is recommended to pump milk and discard for 12 hours after exam.