



GUIDE



Patient Information PET/CT Scan



The Ottawa Hospital | L'Hôpital
d'Ottawa



Disclaimer

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How Nuclear Medicine Works

PET scans are a type of nuclear medicine examination. Nuclear medicine examinations are different from X-ray procedures. X-rays show what your body structure looks like whereas nuclear medicine examinations show how your body's organs are actually working. First you swallow, inhale, or get injected with a substance called a radioactive tracer. This substance travels to the part of your body we want to examine. It gives off energy waves called gamma rays. A special camera builds these rays into a picture. We can diagnose specific problems by looking at these pictures.

What is a PET scan

A PET (Positron Emission Tomography) scan shows us how your body uses the tracer we give you. The most common PET tracer is called FDG. It is a substance like sugar. We inject it into your bloodstream and then we see where it goes and how it is used. We want to know if your body uses the tracer to build abnormal tissue.

What is a PET/CT scan

This test combines the PET scan with a CT (Computed Tomography) scan. The CT scan gives us detailed images of your anatomy or internal structures. We add this to what the PET scan tells us about your body tissue. Together, these tests can reveal diseased tissue that we wouldn't see on a CT scan alone. For the CT scan, we may inject or have you drink a contrast medium (a dye) that makes your internal structures show up better in the scan.

How long does a PET/CT scan take

The scan takes about 30 minutes, but there is some preparation time too. You will be in the department for 2 to 2½ hours in total.

How to prepare for your PET or PET/CT scan

- Don't eat or drink anything (including coffee, mints, or gum) for 6 hours before your scan. You can drink plain water.
- Don't exercise hard for the three days before your scan. (For example, you can go for a walk but don't go jogging.)
- You can keep taking any medication that is safe to take on an empty stomach. Don't take medication that contains sugar.
- If you have received chemotherapy or radiation therapy in the past two weeks please contact the booking office at the number listed below.
- If you have received a needle biopsy of the area of your body to be imaged in the past two weeks please contact the booking office at the number listed below.
- If you are diabetic, watch your diet carefully the day before the scan. Check your blood sugar level often. Try to keep it below 150 mg/dl (or 8.3 mmol/l).
- If you take antibiotics for an infection please notify us immediately.
- Bring a CD of any recent imaging tests (CT scans, MRIs, etc.) with you if they were done at another hospital.
- Please arrive 15 minutes prior to your appointment time.

For female patients

If you are breastfeeding or there is any chance that you are pregnant, tell the technologist before you have the injection.

What the scan is like

- When you arrive, we explain the test and have you sign a consent form.
- We inject the FDG tracer into a vein of your arm.
- You wait in a special waiting area for 45 to 60 minutes as the FDG tracer spreads in your body.
- You go into the scanning room and lie on your back on the scan bed. We make sure you are positioned correctly.
- The bed moves in and out of the scanner. You need to lie still and follow the instructions we give you.
- When the scan starts, we leave the room. We can still hear you and see you through a window and intercom.
- You might hear buzzing or clicking noises from the scanner. These are normal and you don't need to worry.

After your scan

- You can eat and drink as you normally would (unless you are going on to have another test that has special restrictions).
- If you were injected with dye, drink lots of fluids to help flush it out of our body.

