

*If you have  
any questions  
about the scan,  
please call  
312.926.3762  
(TTY: 711).*

## Positron Emission Tomography (PET/CT) Scan for the Brain

A brain positron emission tomography/computed tomography (PET/CT) scan is an imaging exam used to reveal how your brain is working. The test can often detect abnormal brain activity in more detail than other scans, X-rays or invasive testing. This test uses a radioactive solution (tracer) to show metabolic activity in your brain. The radioactive tracer does not cause an allergic reaction.

It also helps your physician monitor:

- Changes in existing conditions
- Your response to treatment

This brochure will help you learn how to prepare for and what to expect during your scan.

Please call us at 312.926.3762 at least 24 hours in advance if you need to change or cancel your appointment.

### To prepare for your scan

If you have had a recent magnetic resonance imaging (MRI) or CT scan at another hospital, please plan to bring the disc or report to your appointment. The nuclear medication physician will compare those tests with your PET/CT scan. Your PET/CT scan final report may be delayed if you do not provide these reports before your scan.

Please tell us if you are taking steroids, such as prednisone or Decadron®. These medications may raise your blood sugar (glucose) too high to do the scan.

Talk to the physician who ordered the scan if you have:

- A history of anxiety
- Claustrophobia (fear of being closed in)
- Pain while lying down

If needed, your physician may prescribe medication to make you more comfortable during the scan. Please be sure to bring that medication with you. You will take it before the test. If you take medication to relax, you will need a responsible adult to take you home after the scan.

### ***If you have diabetes***

Before having this test, it is important to have your blood glucose well controlled. Your blood glucose must be less than 150 mg/dL for the test to be done. If you take medications for your diabetes, take them as follows:

- You may take pills for diabetes with plain water the morning of your scan.
- Do not take insulin within 4 hours of your appointment.

If you have questions, please call the Nuclear Medication Department at 312.926.3016.

### ***At home***

- Do not exercise or do any strenuous activity for 24 hours before your scan.
- Do not eat or drink 4 hours before your scan. This includes food, flavored water, chewing gum and mints. You may have plain water.

Plan to arrive 15 minutes before your appointment time. Be sure to bring:

- Your physician's written order for the test if one was given to you
- A list of your allergies
- A list of all your current medications (prescription, over-the-counter and herbal)
- Photo ID
- Medical insurance information
- Medicare card (Medicare patients only)

### **Arrival**

Come to the Northwestern Memorial Hospital Nuclear Medication Department on the 8th floor Galter Pavilion, 251 East Huron Street, Chicago.

Parking is available for patients and visitors in the garage at 222 East Huron Street, across from Feinberg and Galter pavilions. For a discounted rate, please bring your parking ticket with you. You can validate your ticket at the Customer Service Desk on the 1st or 2nd floor of Feinberg and Galter pavilions.

You will need to remove any loose or hanging jewelry, such as necklaces, earrings, rings or watches. You will need to remove any other metal objects from your hair and any piercings.

### **Before the scan**

Our staff may check your blood glucose by pricking your finger. Your blood glucose will need to be well controlled and less than 150 mg/dL for the scan to be done.

Please let the staff know if you think you might be pregnant or are breastfeeding. If so, we may need to follow special guidelines before the scan.

Our staff will place an IV (into the vein) line in your arm or hand. You will wait in a quiet, dark room for about 20 minutes. The tech will quietly enter the room and inject a small dose of the radioactive tracer into your IV. Then, you will rest quietly in the same room for 40 minutes after the injection. For the most accurate test results, you should not talk or have any other distractions during this time.

### **During the scan**

Once you are in the exam room, our staff will help you lie on a table connected to the PET/CT machine. You will lie on your back, and your head will be cradled into a headrest to limit any motion. For about the next 10 minutes, the PET/CT machine will take a series of “pictures.” You must lie still during this time.

The entire visit takes about 2 hours.

### **After the scan**

You will need a responsible adult to take you home if you have taken medications for pain or to relax you. You may leave as soon as the scan is complete. Resume your normal diet and activities after the scan unless your physician tells you otherwise.

The nuclear medication physician (radiologist) will review your scan and send a report to your physician within 48 hours.

If you have any questions about the scan, please call the Nuclear Medication Department at 312.926.3762 (TTY: 711).