Brain SPECT Scans for Seizures

A brain SPECT scan is like a computed tomography (CT) scan of the brain. SPECT stands for single photon emission computed tomography. The scan shows the blood flow in your brain. By comparing scan results from a scan done during a seizure (ictal) and one done between seizures (interictal), the part of the brain where the seizures start can be located.

Why am I having this test?

The brain SPECT measures blood flow to your brain. During a seizure, the blood flow increases in the part of the brain where the seizure starts. In between seizures, the blood flow can be less than normal to the part of the brain where the seizure started. The blood flow measures during and between seizures can help to find where in your brain your seizures start.

If you are breast feeding, pregnant or think you may be pregnant, tell the radiologist or technologist before you have this scan.

Preparing for Your Test

- You do not need to limit food or drink before this test.
- You may have a second brain SPECT scan the next day.

More on next page ➔
What to Expect

- You will be given an injection of a small amount of a medicine called a radioactive tracer that will allow for the scan to see the blood flow in your brain. The tracer is a very low dose of radioactivity that is safe and will not make you feel differently. The scan will not cause any pain.

- You will be taken to the Nuclear Medicine department on the second floor of Doan Hall for the scan.

- You will be placed on a table with your arms down at your sides.

- A strap will be placed over your chin and forehead to remind you to hold your head still.

- A camera will take pictures for about 35 minutes.

- A second set of pictures may be needed after the camera lens is changed. This would take another 30 minutes.

For the scan during a seizure, the procedure is the same. When a seizure starts, your nurse will inject you with the tracer. You will be taken to the department and the pictures will be taken as before.

The pictures from both scans will be compared to help find the site where your seizures start.

Call if You Have Questions

If you have any questions about this scan, ask your doctor or technologist. Call Nuclear Medicine at (614) 293-5774.

Your scan is scheduled at ___________________ on ___________________. The second scan will be done when you have a seizure.

Talk to your doctor or others on your health care team if you have questions. You may request more written information from the Library for Health Information at (614) 293-3707 or email: health-info@osu.edu.