IMAGING: BRAIN SPECT SCAN

The role of this procedure is to evaluate memory loss and to diagnose Alzheimer’s, neurodegenerative diseases, strokes and seizures. Brain SPECT scans may also be used to evaluate brain injury.

What to expect

■ Before the exam:

There are no pre-exam instructions.

■ During the exam:

The patient receives an intravenous injection (in the vein) of a tracer dose of radioactive material. The level of radioactivity is extremely low and has no side effects. Approximately 30 minutes to one hour later, the scan is done. During that time, the patient is required to lie flat on the back without moving. Using a special nuclear medicine camera, pictures of the brain are taken. The camera does not produce any radiation. It simply detects and records the distribution of the radioactive material in the brain.

■ After the exam:

There are no post-exam instructions, but the patient may be asked to return for a comparison scan, called a Diamox brain SPECT scan, from two to 14 days after the initial scan. Diamox is a drug that increases the blood flow to the brain. A comparison of the first baseline brain scan with a Diamox brain scan provides helpful information to the doctor about the blood flow supply to the brain.