Brain SPECT Scan

Information for patients and families

Read this information to learn:

- what a brain SPECT scan is
- how to prepare
- what to expect
- who to call if you have any questions

Your brain SPECT scan has been scheduled for:

Date: ______________________

Time: ______________________

Toronto General Hospital
585 University Avenue
Medical Imaging Reception
Peter Munk Building – 1st floor
What is a brain SPECT scan?

A brain SPECT scan is a nuclear medicine test. It lets your doctor see all around your brain, not just a flat picture of it. This test let your doctor see the blood flow in your brain so they can tell how well it’s working.

This scan can help your doctor see if there are any problems or diseases in your brain, including:

- brain trauma
- tumors
- Chronic Fatigue Syndrome
- Parkinson’s Disease
- Alzheimers
- other neuropsychiatric (brain) disorders

How do nuclear medicine tests work?

Nuclear medicine tests are different from x-rays. X-rays show what your body looks like. Nuclear medicine tests show how your body and organs are working.

Before a nuclear medicine test, something called a radiopharmaceutical is put in your body. A radiopharmaceutical is radioactive. This means it gives off energy. To get the radiopharmaceutical in your body, you will:

- swallow it
- breathe it in
- or get an injection (a needle)

It will travel to the part of your body that your doctor wants to see. When it reaches the right area, we will take pictures of you. We will use a special machine called a gamma camera. It takes pictures of the energy coming from the radiopharmaceutical (also called radioactive tracer).
Nuclear medicine tests can help find problems that other tests can’t find.

How do I prepare for the test?

- Check in at the Medical Imaging reception area (University Avenue entrance, across from the pharmacy) 15 minutes before your appointment.

- Remember to bring your health card (OHIP). If you do not have an OHIP card, please bring another form of government-issued photo ID (such as a driver’s license, passport, or other provincial health card).

- If you haven’t registered, come to Toronto General Hospital 30 minutes before your appointment. Go to Patient Registration on the Ground floor near the Elizabeth Street entrance.

For women: If there is any chance that you are pregnant, tell the technologist before you are given the radioactive tracer.

You will need to stop breastfeeding for 24 hours after this test. Tell the technologist if you are breastfeeding.

What can I expect?

1. A technologist injects a small amount of radioactive tracer into a vein in your arm or hand.

2. The scan starts right after you are injected if you get injected while on a scan bed. The scan takes about 5 minutes.

3. When the scan is done, you go to the waiting room for 30 to 60 minutes. This time allows the tracer to build up in your brain.

4. After 30 to 60 minutes, you go back into the same room and lie down on the same bed. The scan starts again and will take about 20 minutes.
Are there any side effects?
There are no known side effects from this test. You can go back to your normal activities once the test is over. We will send a report to your doctor.

Who can I call if I have any questions?
If you have any questions or concerns or if you need to cancel or reschedule your appointment, please contact the nuclear medicine department at 416 340 3311.

The nuclear medicine department is on the 1st floor of Toronto General Hospital, EB1 – 410, near the Eaton elevators.