

## **Perfusion Brain Scan**



#### Disclaimer

This is general information developed by The Ottawa Hospital. It is not intended to replace the advice of a qualified healthcare provider. Please consult your healthcare provider who will be able to determine the appropriateness of the information for your specific situation.

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Your doctor has requested a perfusion brain scan. This leaflet will answer some of the questions you may have.

#### What is a perfusion brain scan?

This is a simple and painless way of taking pictures of your brain using a radioactive tracer. This procedure also looks closely at the blood supply to your brain.

#### **Do I need to prepare for the scan?**

No special preparation is required. Food and drink will not interfere with this test.

### What is involved?

When you arrive in the Nuclear Medicine Department, a technologist will explain the procedure in full detail before proceeding. The technologist will then insert a small needle in your arm, called an intravenous tube. You will be asked to lay still and relax for 10 to 15 minutes before receiving your radioactive injection. The distribution of the radioactive tracer will be adversely affected if your brain is too active at the time of injection.

The technologist will then inject the radioactive tracer through the intravenous tubing. The amount of radioactivity is very small and will have no adverse effect on you.

There is then a waiting period of approximately 30 minutes during which the tracer will concentrate in the brain.

At the end of the waiting period you will be asked to lie down on a table and a special detector, called a gamma camera, will be positioned close to your head and will revolve around your head taking pictures as it does so. The camera does not emit radiation; it simply picks up signals (gamma rays) from the radioactive dye which was injected. The procedure takes about 20 minutes.

You may then return home and will feel no ill effects from the examination. The results of your exam will be sent directly to your physician.

### Will it hurt?

Only the 'pinprick' of the injection needle may hurt a bit. You may have had a blood test in the past. This is much the same.

## Is the radiation dangerous?

The amount of radioactivity used for this test is quite small and will disappear by itself soon after the scan is finished. Most of the radioactivity disappears within one day and any remaining traces disappear within one week. The amount of radiation is similar to that from an x-ray examination.

#### Do I need to do anything after the scan?

No special precautions are needed after the scan. If you are travelling across any borders in the seven days after your scan, please ask us for further advice. Ports and airports have very sensitive radiation detectors which may pick up tiny amounts of radioactivity remaining after your scan. We will give you a letter that you can show to customs officials at ports or airports.

## What happens to the results of the scan?

A specially trained doctor will examine the pictures. This is normally done soon after the end of the scan. A report is then sent to the doctor who asked us to do the scan. Your doctor will normally receive the report within one week.

# *Is there anything I should tell the staff before the scan?*

Yes, if you are pregnant or think you may be pregnant, please telephone us to let us know. Also, please telephone us if you are breastfeeding.

#### What if I have more questions?

We want your visit to be as pleasant as possible. If you have any questions, please ask the staff in the Nuclear Medicine Department. You can telephone before the day of your test, or ask before the scan starts. **Our telephone number is 613-761-4831, ext 8.** 

#### Notes