

GUIDE

Radionuclide Cisternogram



The Ottawa | L'Hôpital
Hospital d'Ottawa

Disclaimer

This is general information developed by The Ottawa Hospital. It is not intended to replace the advice of a qualified health-care provider. Please consult your own health-care provider who will be able to determine if this information is appropriate for your specific situation.

What is a Radionuclide Cisternogram?

A radionuclide cisternogram is an imaging test that follows the pathway of spinal fluid in the spinal column and throughout the brain. This test is useful in determining if any obstructions are present in this pathway.

What is involved?

This procedure will take at least three separate visits to the hospital to complete. The first visit will take most of the day to complete. The remaining visits will take one hour or less to complete. You may bring a light snack with you on the first day, since you will be in the department for several hours. If you are taking blood thinning medication, you will be required to stop taking this medication for five days preceding your appointment. Always check with your family doctor before stopping any medications. It is advisable that you travel with someone else on the first day, since the radioactive injection may give you a slight headache and you may not feel up to driving or taking the bus alone.

Your first appointment will take place in the x-ray department. When you arrive for this appointment, a specially trained doctor will explain the entire procedure to you and ask you to sign a consent form before proceeding. You will then be asked to lie down on an x-ray table and the doctor will give you a small injection of freezing solution in your lower back area. This freezing injection will numb the area where you are to receive the second injection. X-rays will then be taken of your lower back to determine the exact location for the second injection. The doctor will then inject a small amount of radioactive tracer into your spine. Once this injection has been given, you will be asked to get down from the imaging table and lie still on

a stretcher for approximately 20 minutes. You will then be transferred to the Nuclear Medicine department.

You will be required to wait approximately four hours in the Nuclear Medicine department, while the radioactive tracer travels to your brain. After your waiting period, a technologist will bring you into an imaging room and ask you to lie down on another imaging table. The technologist will place a special camera, called a gamma camera close to your head. Several images will then be taken of your head to see how the tracer has moved. These images normally take approximately 30 minutes to complete.

In order to properly see the spinal fluid travelling through your brain, it will be necessary for you to have these images repeated on the following two days as well (24 and 48 hours after the injection). You will be instructed when to return for each of these additional appointments before leaving the department.

Will it hurt?

The freezing solution injected into your lower back area should help with any pain that you may experience. However, you may also experience a small amount of pressure as the radioactive tracer is injected. Normally this sensation passes in a few minutes.

Is the radiation dangerous?

The amount of radiation used for this procedure is very small and considered safe. The radioactivity will disappear by itself soon after the scan is finished (nearly all of it disappears within one week).

Do I need to do anything after the scan?

Some individuals may get headaches with this type of exam. The best way to avoid this is to remain flat for the first few hours following the injection. If you begin to experience a headache, try lying flat and taking an over the counter pain medication. You are encouraged to drink extra fluids for the first 24 hours following your injection. Some patients may experience headaches, back pain, and leg or hip pain. Please go to the emergency department of your nearest hospital if any of these symptoms become severe.

You can eat normally and resume normal activity the day following the injection. If you are travelling abroad in the seven days after your scan, please ask us for further advice. Ports, airports and border crossings 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.

What happens to the results of the scan?

A Nuclear Medicine physician will examine your pictures. This is normally done when your procedure is completely finished. A report is then sent to the doctor who asked us to do the scan. Normally these results are available within one week following the completion of your test.

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. If you are concerned that a medication you are taking may affect the results, then please check with the technologist performing your test before you start. 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 your test day, or ask before the scan starts. **Our telephone number is 613-761-4831, option 8.**

Notes
