

What is a Brain Perfusion scan?

It is a simple procedure, similar to an X-ray, in which a small amount of radioactive material is injected to provide pictures of the blood flow in your brain.

Why am I having this test?

The test can help pin-point in the brain the area where your seizures originate.

This is most commonly performed if your doctor is considering using surgery to treat your epilepsy. This test is only useful if you are having several seizures (fits) every day.

What does it involve?

There are two parts to this test. The two parts are performed on different days.

Day 1

We will give you a small injection in a vein into your arm either during or shortly after a seizure. We will use an EEG test to monitor your brain activity to help us pinpoint the right time to do this.

Approximately 1 hour later we will take some pictures of the blood flow in your brain using a special machine called a gamma camera. This takes 30 minutes and all you need to do is keep very still while the pictures are taken.

Day 2

This is similar to day 1 except you are given an injection when you are not having a seizure.

Do I need to prepare for the test?

Avoid drinks containing caffeine such as tea, coffee, cola, energy drinks and smoking from 10 pm the night before both appointments, as these may affect our results.

Can I take my medication?

You may need to stop your epilepsy medication for day 1 of the test. Your doctor will ask you to do this. Please bring your epilepsy medication with you.

Is the radiation dangerous?

No, even though you will be injected with a radioactive material the amount involved is very small indeed and is similar to an equivalent X-ray examination.

Will it hurt?

Only the pinprick of the injection may hurt a little - it is similar to a blood test that you may have had before. You should not notice any unpleasant effects from the injection, it will not make you feel sleepy or prevent you from driving a car.

Are there any special precautions afterwards?

The only thing we do advise is to avoid prolonged close contact with children or pregnant women for the remainder of the day - simply to avoid exposing them to any unnecessary radiation.

For children under investigation, the radiation dose is so low that there is no need to observe the above precaution.

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The radioactivity disappears naturally by a process called decay.

Note for female patients

Please contact the department before your appointment if there is a chance you may be pregnant or if you are breastfeeding.

What happens to the results?

The results take several days to process. They will then be seen by a doctor in the department and a report will be sent to the doctor who asked us to do the scan

General

There are no lockable facilities in Radiology. We strongly recommend that any valuables are left at home. Please be aware that CCDHB does not take responsibility for any loss or damage of personal property belonging to patients whilst on CCDHB premises

Contact us

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Email: radiology.admin@ccdhb.org.nz

