

What happens if I am unable to exercise?

Some people, because of a variety of disabilities are unable to exercise adequately on a treadmill machine to achieve a diagnostic test result. In this case, similar results can be achieved using a drug called Persantine.

What does Persantine do?

Persantine is a drug that dilates the blood vessels to the heart. This allows for greater blood flow going into the heart.

What is the difference between a Persantine and an Exercise test?

Persantine will be injected through the I.V. in your arm over a period of 5 minutes. After this time, the Cardio Lite™ will be injected. This entire process will take 15 minutes. You will be lying on a table instead of running on a treadmill. The rest of the setup is the same as the exercise.

Are there any side effects from Persantine?

Persantine often causes a flushing feeling. Many patients feel very tired after a Persantine test, similar to having exercised very hard. It is recommended that someone accompany you if you are having a Persantine stress test, as you may feel too tired to drive yourself home.

Are there any risks from Persantine?

Similarly to the exercise test, any procedure may have some risks, and you should consult with your physician regarding the risks and benefits of this procedure.

When will I get my results?

The nuclear physician will dictate a report on the results of your scan. The report will be sent to your referring doctor. Should you require an additional copy to be sent to another doctor, please make sure to tell reception upon registration. You should make an appointment with your referring doctor at some time who will discuss the results of your heart scan.

APPOINTMENT DATE: _____

TIME: _____

****Please contact us if you are unable to attend the test or if you have any questions.**

IMPORTANT

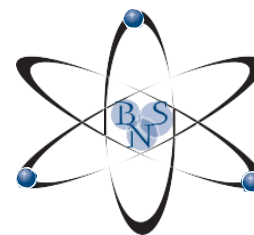
1. Bring **all** medications with you.
2. We suggest you wear comfortable clothes and shoes.
3. If there is a **language** barrier- it is best if you bring someone to **interpret** for the patient.

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Brampton Nuclear Services

Nuclear Cardiac Test



A Patient's Guide

What is the purpose of a Nuclear Cardiac test?

A Nuclear Cardiac scan can be performed for many different reasons:

- The test is important for evaluating the presence and extent of suspected or known coronary artery disease (blockages) as well as the results of previous injury to the heart.
- Unexplained chest pain or chest pain brought on by exercise (angina) to permit the early detection of heart disease.
- When the results of a routine treadmill test are unclear.
- To determine the functional significance of coronary blockage observed on an angiogram.

What is a Nuclear Cardiac stress test?

The test involves an injection of a small amount of radioactive material, which circulates in the bloodstream and shows if your heart muscle is receiving adequate blood supply under stress and/or rest conditions. The radioactive injection is a clear liquid called Cardio Lite™ (Tc99m tetrofosmin for injection). Another material, which could also be used, is called thallium.

How safe is a Nuclear Cardiac test?

Any stress procedure may have some risks, and you should consult with your physician regarding the risks and benefits of this procedure. The radioactive materials Cardio Lite™ and thallium have been shown to be safe, with low incidence of adverse reactions. This test and these materials are used routinely worldwide, **under physician supervision.**

Neither Cardio Lite™ nor thallium are “dyes” and usually there are no serious side effects from there injection.

Why would my doctor order a Nuclear Cardiac stress test instead of a regular stress test?

Under certain circumstances, a regular stress test may yield unclear results. To improve the diagnostic accuracy, your physician may request a Nuclear Cardiac test.

How is the test performed?

The test consists of two parts. The first part consists of taking pictures after a certain amount of a rest period. The second part of the test consists of pictures taken after some kind of exercise, either treadmill or persantine. There are many variations for performing the test, which depend on the department’s routine procedure. A small amount of a radioactive material called Cardio Lite™ will be administered by injection when you are at rest and once again during peak exercise.

Your first set of rest pictures will be taken approximately 45 minutes after your first injection of Cardio Lite™. The pictures will be taken of your heart using a unit called a gamma camera. You will be asked to lie down on a special bed on your stomach, or your back. The camera will rotate around your chest. This will take anywhere from 15-30 minutes. You may breathe normally while the pictures are being taken. **It is very important that you do not move during the pictures. Moving will cause blurring of the pictures and may necessitate having to take the pictures all over again.**

As in a regular stress test, ECG electrodes will be attached to your chest. This will allow your physician to monitor your heart rate before, during and after exercise. A blood pressure cuff will be placed on your arm to monitor your blood pressure before, during and after exercise. Additionally, an intravenous (I.V) line will be placed in your arm or hand vein shortly after your arrival to allow for ease of injecting Cardio Lite™ when necessary during the exercise portion of the test. The I.V. will be removed when the exam is completed.

The exercise part of the exam is done with a treadmill, very similar to the one used at a health club. Exercising will begin slowly and approximately every three minutes the pace will gradually increase. As you exercise, your heart rate and blood pressure will change. These reactions are normal, and remember you are being closely monitored throughout the entire exam. At peak exercise, Cardio Lite™ will be injected into the I.V. and you will be asked to continue exercising for an additional one to two minutes.

At a minimum of 15 minutes after the exercise, pictures will be taken of your heart in the same manner as the rest pictures. The total time needed for the test will run anywhere between 4-5 hours to complete in its entirety.

Are there any special preparations/instructions for the Nuclear Cardiac study?

Clothing

You should wear comfortable, loose fitting clothing for exercise and comfortable shoes that are appropriate for walking.

Food

You are required to avoid caffeine beverages and chocolate for a period of 24 hours. You may drink only water, juice and milk and you may eat as normal the day before your test. The morning of the test you are required to fast from midnight the night before. You may drink water ONLY the morning of your exam. If you are diabetic you may have some dry toast, any fruit and juice or water to drink. It is a good idea that you bring from home some bread, fruit and juice as your diet restriction stays the same for the length of the test.

Medications

Consult with your physician regarding whether certain medications should be taken before, or held off, until after the test. Certain medications may interfere with the effectiveness of the exam.