



Kawartha Cardiology
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MYOCARDIAL PERFUSION IMAGING (MPI NUCLEAR)

Myocardial Perfusion Imaging, uses small amounts of radioactive tracers to evaluate blood flow to the muscle of the heart and to assess heart function. Special cameras, Gamma Cameras, are used to image the heart after the injection of tracer. These tests are done in 2 parts, a Stress test and a Resting test. It does not matter what order the tests are done in. The Stress test is done either on a treadmill, or by giving a drug called Persantine or Dobutamine. You will be hooked up to an ECG and an IV line will be started in your arm. During the test your heart rate and blood pressure will be monitored. The tracer will be given during the stress test through the IV line and you will have a set of images taken afterward to assess your heart's response to stress. The Resting test is a second set of images without stressing the heart first. This may or may not require a second injection of the tracer. Both sets of images will then be compared to each other to look for changes.

It is very uncommon to have any reaction to these tracers. You will be required to keep your arms raised and or above your head for 10-20 minutes for each set of images. After several hours you will have the second part of your test. The Nuclear Technologist will give a reminder note with your return appointment details to you.

Instructions

These instructions are important and failure to comply with them could result in test cancellation due to the effect the substances may have on test results

- When directed by your physician, 72 hours before the test stop medication know as Beta Blocker in advance of the test, these include names such as: Metoprolol, Nadalol, Pindolol, Propranolol, Sotolol.
- 24 hours before the test, stop taking caffeine in all forms. This includes: coffee (regular and decaf), tea, herbal teas, all soft drinks, all energy drinks, all forms of chocolate.
- 24 hours before test do not take: Anacin, Dristan, Excedrin, non-drowsy medications, Sinutab with Codeine, Tylenol 1,2, &3 (they contain caffeine).
- 24 hours before the test, do not take Cialis, Levitra, Viagra.
- 12 hours before the test, stop smoking or using any form of Nicotine.
- If you are pregnant or nursing, please contact the Nuclear Department (705-745-9195).

How should I prepare?

- Do not use any scented skin products, including: talcum, lotion, perfume, cologne, aftershave, etc.

- Ensure you have your Health Card with you.
- You should wear comfortable clothing and footwear for exercise.
- Bring a list of all your medication(s).
- Ask your doctor if you should stop certain medications before the test
- Do not eat within 4 hours of your test, unless you are diabetic.

What happens during the test?

- Your test will be conducted by a trained Cardiovascular Technologist (CVT) and/or Registered Nurse (RN) and a Nuclear Medicine technologist.
- You will have the tests explained to you and you will be asked to sign a consent.
- You will have an intravenous line started.
- Your heart rate and blood pressure will be monitored.
- The “tracer” will be injected through the IV line while you are exercising or having other medication infused.
- You will have images taken on a specialized camera to assess your heart under stress.
- A second set of images will be done later in the day (the time to return will be given to you after the first set of images).

The order of the above testing may vary. Sometimes, resting images may be done before Stress images.

Should you need to cancel

These tracers are very expensive and have a very limited shelf life. They cannot be saved for use at a later date. There is a long list of patients waiting to have this test. Therefore, if you are unable to keep your appointment; it is imperative that you call 705-745-9195 **48 hours in advance** so that we can book someone else in your place.