

Myocardial Perfusion Imaging

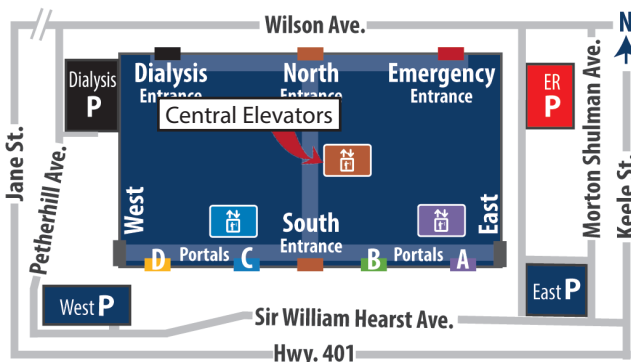
Appointment Information



You have an appointment for a **myocardial perfusion imaging test**. Please read this handout for information on how to prepare for your test.

Location: Medical Imaging - Nuclear Medicine
Humber River Health, 1235 Wilson Ave., Toronto, ON M3M 0B2

We are located on the main floor (level 1), behind the Central Elevators. Follow the signs to Nuclear Medicine Registration.



Arriving by car (or Wheel-Trans): Use the South Entrance.

Arriving by TTC: Use the North Entrance.

Bring to the hospital:

- Your health card (OHIP) and photo ID.
- All the medicines you are currently taking, including over-the-counter medicines, herbals and supplements, in their original containers.
- Appropriate footwear for exercising on the treadmill.
- A light snack, as we encourage you to eat during the test.

Do not bring jewelry or other valuables.

What is myocardial perfusion imaging?

Myocardial perfusion imaging is a test that measures the amount of blood in your heart muscle, at rest and during exercise.

We will inject a small amount of radioactive material into your vein. As it moves through your body, your heart will pick up the radioactive material.

We then use a special camera to detect problem areas, which will absorb the radioactive material differently than normal areas.

PLEASE NOTE: As we do not carry a supply of the radioactive material at the hospital, we will order the radioactive material for your test in advance.

Upon receiving the material, it loses its radioactivity within 24 hours. **If you cannot attend the test, please tell your doctor or contact us at (416) 242-1000, ext. 63823, as soon as possible.** This will allow us to cancel your order before it arrives.

How do I prepare for the test?

TELL YOUR DOCTOR IF YOU:

- Are currently taking medicine for a heart condition. Your doctor will let you know which medicines, if any, to stop taking before the test.
- Are pregnant, think you may be pregnant, or are breastfeeding.
 - If you are pregnant, you and your doctor will discuss the safety issues of having the test at this time.
 - If you are breastfeeding, we may postpone your test or ask you to stop breastfeeding as the radioactive material we inject can transfer to the breast milk.
- Have any allergies, especially to any medicine. Share this information with your healthcare team and wear your MedicAlert® bracelet on the day of your test.

12 HOURS BEFORE YOUR TEST:

- **NO caffeine. This includes NO coffee, tea, colas, chocolates, and decaffeinated products.** Caffeine will interfere with the test results.

ON THE DAY OF YOUR TEST:

- Take your medicine as your doctor advised.
- Wear loose, comfortable clothing to be worn on the treadmill.
- If you need support, you may have someone with you during the test. Please do not bring young children or pregnant women.
- Bring a light snack to your appointment. There will be times during the test where you will be waiting for the radioactive material to move through your body. We encourage you to eat while you are waiting, however **DO NOT eat or drink foods or liquids with caffeine.**

What can I expect during the test?

BEFORE THE TEST:

- We will ask you to sign a consent form before starting the test.
- Remove your clothes, from the waist up, and change into a hospital gown.
- Remove any jewelry, eyeglasses, hair clips, or metal objects you are wearing that may interfere with the camera.

DURING THE TEST:

We will be taking 2 sets of pictures: 1 set before the treadmill and 1 set after the treadmill.

- We will inject a small amount of radioactive material into your vein. After about 30 to 60 minutes, we will ask you to lie on an imaging bed, under a special camera.
- The camera will detect the radiation from the radioactive material. We will take pictures of your heart, showing where the radioactive material has gathered. Please lay very still and breathe normally as we take the pictures. You will not feel anything.
- Once we finish taking the pictures, we will ask you to walk on a treadmill. A doctor will be present to supervise the test. We will also place sticky electrodes onto your chest and a blood pressure cuff around your arm to monitor your heart.
- As you are exercising, we will inject another small amount of radioactive material.
- After the exercise part of the test, we will ask you to wait for 1 to 2 hours.
- Afterwards, we will ask you to lie back down on the imaging bed. You will need to keep very still and breathe normally as we take a second set of pictures.
- The whole test can take about 3 to 4 hours.

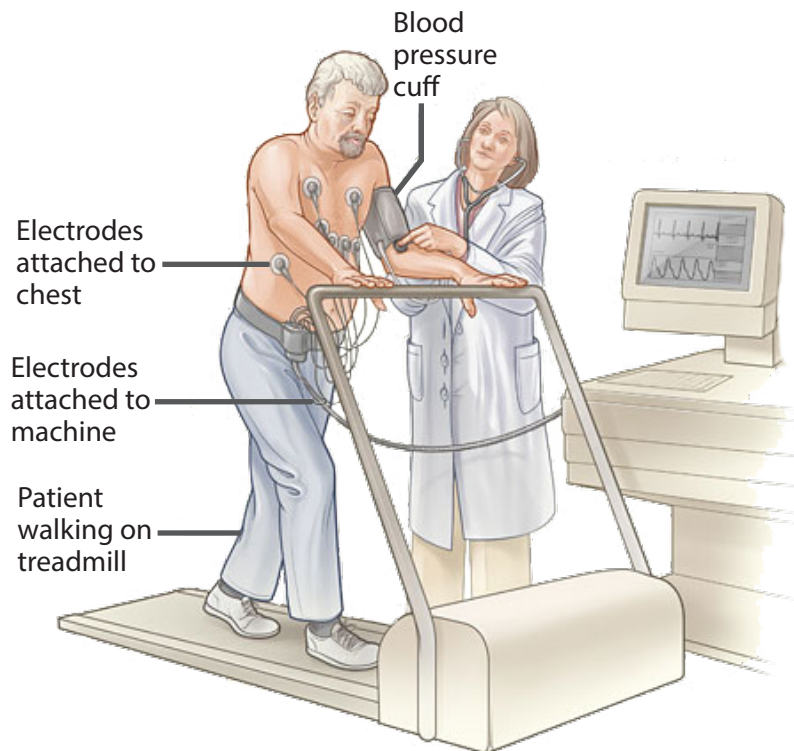


Image Source: National Heart Lung and Blood Institute (NIH) / Public domain

What if I cannot exercise on the treadmill?

If you are unable to exercise on a treadmill, the doctor may instead give you a medicine called Persantine. The medicine mimics the stress from exercising by increasing the blood flow to your heart.

We will ask you to lie on a stretcher and will slowly inject Persantine into your vein (over 4 minutes). The medicine will start to work right away. A doctor will be present to supervise the test. We will also place sticky electrodes onto your chest and a blood pressure cuff around your arm to monitor your heart.

For this test, we will also be taking 2 sets of pictures: 1 set before the medicine and 1 set after the medicine.

At any time during the treadmill or Persantine test, tell staff if you have:

- Shortness of breath
- Chest pain
- Arm pain
- Heart palpitations (heart feels like it is pounding, fluttering, or skipping a beat)
- Difficulty walking
- Headache
- Fatigue (tiredness)
- Upset stomach
- Dizziness
- Other discomfort.

How do I care for myself at home?

CARE INSTRUCTIONS:

- You may resume all your regular activities, unless your doctor tells you otherwise.
- Continue to drink extra fluid throughout the day to help flush the radioactive material out of your body.

TRAVEL INSTRUCTIONS:

- Small amounts of radiation from your body may set off radiation monitors at airports, border crossings, and waste disposal sites.
- If you will be in these areas (or travelling outside of Canada) in the near future, tell your doctor or technologist. They may provide a letter describing the medical test you received.

RESULTS:

- A specially trained doctor will interpret your pictures and send a report back to your doctor. This usually takes several days.
- Your doctor may order other tests to gather more information.
- When your report is ready, you can view it on **myHumberHealth** (<https://myhumberhealth.ca>) or buy an electronic copy from **PocketHealth** (<https://hrh.mypockethealth.com/request>). Please make sure we have your correct email address at registration.

Are there any risks associated with this test?

There is low risk from the radioactive material. Your body is able to get rid of the radioactive material completely within several days.

Myocardial perfusion imaging is safe for patients with kidney disease and renal impairment.

There may be a small chance of having a heart attack (about 1 in 10,000 people) during the test, either with exercise or medicine. A doctor will always be present to supervise the test to ensure your safety.

Common side effects of Persantine include an upset stomach and headaches. Less common side effects include chest pain, dizziness, and shortness of breath. If you experience any of these side effects during the test with Persantine, we will give you another medicine that can reverse the effects and make you feel better right away.

For questions or concerns about the test, please speak to your doctor.

For more information, please contact:

**Medical Imaging - Nuclear Medicine,
Humber River Health**

Tel: (416) 242-1000 ext. 63823

7:00 a.m. to 4:00 p.m., Monday to Friday