
Is there any risk involved?

This is a frequently used procedure with a very high margin of safety but there are some risks. The test will be stopped if:

- you have a subjective feeling of exhaustion (tired legs or fatigue)
- abnormal blood pressure
- abnormal ECG. This could be a detection of either an abnormal heartbeat (arrhythmia); or ischemia, which occurs when the heart muscle is not receiving enough oxygen to perform that amount of work
- severe chest pain or any other discomfort. This may be in the form of chest, arm, jaw or leg pain, lightheadedness or undue shortness of breath
- target heart rate reached

Outpatients please report to Patient Registration 15 minutes prior to your appointment time.

ROYAL COLUMBIAN HOSPITAL

330 East Columbia Street,
New Westminster, B.C.

Telephone 604-520-4244

Appointment Time:

RIDGE MEADOWS HOSPITAL

11666 Laity Street,
Maple Ridge, B.C.

Telephone 604-463-1802

Appointment Time:



MPI Exercise Tolerance Test

**(Myocardial Perfusion
Imaging)**

A Patient Information Guide

MPI Exercise Tolerance Test

What is it?

- You perform this exercise test by walking on a treadmill or by pedaling a bicycle. The elevation of the treadmill or the resistance of pedaling is increased every three minutes. During the test, your heart rate, electrocardiogram and blood pressure are monitored.
- This procedure is a 2 day test.

Why do I need one?

- Your doctor wants to determine the responses of your heart, lungs and muscles to exercise. Also, we want to determine the intensity of exercise you may engage in safely. It is important that you perform this test to the best of your ability in order to make our measurements as accurate as possible.
 - If you have been experiencing angina, this treadmill test will give a good indication of how much exercise you can tolerate before experiencing problems.
 - Following a heart attack, an Exercise Tolerance Test is done 3-6 weeks after discharge, depending on your doctor. This is usually done to determine how well your heart has healed. It is also a factor in deciding when you can go back to work or continue on an exercise program.
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Is there any special preparation?

- Wear good walking or running shoes.
- Bring money for breakfast or bring one.
- **Do not eat or drink anything after midnight the night before your test.**
- If you do not speak or understand English, bring an interpreter.
- Diabetic patients should consult their physician for specific instructions.
- Do not take your morning pills before the test. Bring them with you to take with your breakfast at the hospital.
- No coffee, tea or caffeine products for 24 hours before the test.

What happens at the test?

The test is done by a Cardiology technologist, a Nuclear Medicine technologist and a physician.

Day 1:

- Report to the Cardiology Department.
 - An intravenous will be started before the test. This enables a Nuclear Medicine technologist to inject, at an appropriate time, determined by the physician, a very small dose of a radioactive tracer called Tc99M Tetrofosmin through the intravenous.
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- The technologist will attach electrodes to your chest and hook you up to an ECG machine. You will walk/run on the treadmill.
- When the first part of the test is over, you will be asked to eat (e.g., milk and toast or a full breakfast). You can obtain this from the hospital cafeteria (located in the basement of the Health Care Centre). Approximately 1-3 hours after the injection, report back to the Nuclear Medicine Department where they will take images of your heart.
- Allow approximately three hours for the total procedure on day 1.
- You will be given a return appointment time for day two.

Day 2:

- No caffeine products 12 hours before your test.
 - Do not eat or drink anything after midnight, the evening prior to your test.
 - Report directly to Nuclear Medicine. You will receive a second injection and asked to eat. Approximately one hour after the injection, a technologist will take images of your heart. These images will be compared with the images of your heart on day one.
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