

# Myocardial Perfusion Imaging (MPI) With Exercise Stress Test

## General Information

Myocardial perfusion imaging (MPI) with an exercise stress test helps your doctor see how well your heart works at rest and during stress. This test also helps your doctor tell if parts of your heart muscle are not getting enough blood.

During the test you will receive a radioactive material, known as a tracer, through an intravenous (IV) line in your hand or arm.

The amount of radiation you will receive from the tracer is small. It is about what you receive from a CT chest scan.

The test usually takes 3 to 4 hours which includes preparation time.

## Side Effects and Risks

Like with any test that involves stress, there are risks. They can include irregular heartbeat, heart attack or death.

Serious side effects are rare. If you have any issues, a doctor will help you right away. The stress staff has special training in this testing and will help you.

Ask your doctor any questions you have about the test.

## Your Test

Date: \_\_\_\_\_

Time: \_\_\_\_\_ a.m. / p.m.

Date: \_\_\_\_\_

Time: \_\_\_\_\_ a.m. / p.m.

Location:  
\_\_\_\_\_

If you need to reschedule your test, please call:

- Allina Health Minneapolis Heart Institute — Minneapolis: 612-775-4201
- Allina Health Minneapolis Heart Institute — Edina: 952-428-0500
- Allina Health Minneapolis Heart Institute – Baxter: 218-855-5280.

## Before the Test

- For 24 hours before the test, **do not** eat or drink anything with caffeine such as:
  - caffeinated or decaffeinated beverages (such as coffee, tea, soda or energy drinks)
  - chocolate
  - medicines that contain caffeine, unless your doctor tells you otherwise.

**(over)**

- For 4 hours before the test, **do not** eat or drink anything.
- **Do** take any medicines you usually take. Your doctor will tell you if you should not take certain medicine.
  - If you have diabetes, you may receive special instructions about your medicine and diet.
  - If you take any medicine that contains caffeine, ask your doctor if you should take it.
  - **If you take medicine for your heart or high blood pressure, ask your doctor if you should take it.**
- Wear loose, comfortable clothing (slacks and a top) and walking shoes.
- Tell your doctor and technologist if you are breastfeeding, pregnant or think you may be pregnant.

## During the Test

- The technologist will inject the tracer through an IV line in your hand or arm 30 to 60 minutes before the first scan. The tracer is not an iodine contrast.
- After you enter the scan room, you will lie on your back on an imaging table.
- You will need to lie quietly while a camera scans your heart. This will take about 25 minutes.
- After the first scan, a technician will put electrocardiogram (ECG) patches on your chest to monitor your heart rate.
- You will then walk on a treadmill.
- Your heart rate and blood pressure will be monitored during the test. It is normal for the heart rate and blood pressure to change during exercise.
- Every 3 minutes, the treadmill will increase in speed and tilt upward, like a small hill.

- When you are close to your maximum exercise level, you will get a second injection of the tracer through the IV line. After one more minute of exercise, you will be told to stop walking or running.
- After you rest for a short time, the technologist will scan your heart a second time for about 25 minutes. You will need to lie quietly while the camera scans your heart.

## After the Test

- The IV catheter will be removed from your arm or hand and a bandage put on.
- The ECG patches will be removed.
- You may return to your normal activities.
- The test results will be sent to the doctor who ordered this test for you. They will notify you of the results.

## Two-day Test

Sometimes, MPI studies are done over two days. Usually, the stress part of the test is done on the first day and you are scheduled a day or two later to return for the resting pictures. Each appointment will last about 2 hours.

Please follow the “Before the Test” instructions on the day of the stress test. No special prep is needed on the day of the resting pictures.

If this is how your test is scheduled, the appointments will be explained to you when they are scheduled.