

# PET (Positron Emission Tomography) Metabolic Imaging for Myocardial Viability

## General Information

This type of PET test helps your health care provider:

- decide how much damage your heart has after a heart attack
- see how well bypass surgery or vascular procedures (to restore blood flow to your heart) worked
- predict how well a planned bypass surgery or vascular procedure will work.

You may also have a test to see how well your heart works at rest and during stress. This helps your health care provider tell if your heart muscle receives enough blood.

Your blood glucose level is checked with your heart at rest. You will receive dextrose (sugar water) through the IV, then some insulin. This helps your heart muscle absorb the radioactive glucose you will receive.

The radioactive glucose helps your heart muscle show up on the PET scan. A second PET scan is done about 1 hour later.

The test takes about 4 to 5 hours.

## Possible Side Effects

- Possible side effects from the stress medicine could include chest pressure, headache or nausea. These usually go away quickly.
- 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.

## Your Test

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

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

**Location:** Mercy Heart Center, 4040 Coon Rapids Blvd., Suite 8, Coon Rapids, MN 55433 (Enter through The Heart Center entrance.)

Arrive 15 minutes before your appointment. Try to call within 24 hours if you need to cancel or reschedule your exam. Call 763-236-7700 between 6:30 a.m. and 4:30 p.m.

## Before the Test

- You may need to stop taking some medicines before the test. **One to 2 days** before your test, talk with your health care provider or call 763-236-7700.
- For **24 hours** before the test:
  - Do not have any caffeine. This includes:
    - any caffeinated or decaffeinated beverages (coffee, tea, soda or energy drinks)
    - chocolate
    - medicines that contain caffeine (such as Excedrin®).

**(over)**

- For **12 hours** before the test:
  - Do not use any products that have tobacco or nicotine. This includes e-cigarettes, vape pens, smokeless tobacco or oral tobacco products.
- For **6 hours** before the test:
  - Do not eat or drink anything.
  - Do not exercise or do any activity that is repetitive or involves effort such as yard work, sports or hunting.
  - Do not have a deep tissue massage.
- Do not put any lotions or oils on your skin the day of the test.
- Wear comfortable clothing with as little metal as possible (such as zippers).
- If you use an inhaler, bring it with you.
- Bring a list of your current medicines and allergies with you. Be sure to include prescription and over-the-counter medicines, vitamins and herbals.
- Tell the technologist if you are breastfeeding, pregnant, or think you may be pregnant.

## During the Test

- You will have an intravenous (IV) line placed in your arm or hand.
- A nurse will put electrocardiogram (ECG) patches on your chest to monitor your heart.
- You will lie on your back on an imaging table with your arms over your head.
- You will lie still for about 30 minutes.
- The nuclear technologist will inject the radioactive material (tracer) through your IV.
- The PET camera will take pictures of your heart for about 10 minutes.

- If you are also having a stress test, you will receive a medicine (through the IV) that will open your blood vessels like you are exercising.)
  - Your heart rate and blood pressure are watched closely for changes during the test.
  - Right after the stress test, the technologist will take a second scan of your heart for about 10 minutes.
- You will be taken out of the PET camera.
- You will have your blood glucose checked several times in another room. You will receive dextrose, insulin and radioactive glucose through an IV. About 1 to 2 hours later, the PET scan is repeated.

## 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 should avoid close contact with others (especially children) for 12 hours after your test.
- You will need to drink extra liquids (water is best) and go to the bathroom often for 4 hours after the test.
- You may return to your normal activities.
- The test results will be sent to the doctor who ordered this test for you. You should receive the results in 5 to 7 business days.

## Whom to Call With Questions

Call 763-236-7700 between 6:30 a.m. and 4:30 p.m. if you have any questions about the test.