**Test location: 1st floor heart station**

You are scheduled for a persantine sestamibi scan. This test shows how well blood supplies your heart muscle after exercise and at rest. For this test, two substances will be injected into the vein of an arm: persantine and sestamibi. Persantine makes your blood vessels expand. You will get persantine because you are unable to walk on a treadmill. Persantine makes the heart mimic the effects of exercise so that you do not need to walk on the treadmill. Sestamibi is a radioactive compound that helps with scanning pictures. When sestamibi goes to tissues with normal blood flow, they look light when they are scanned; tissues with poor blood flow look dark.

You may have heard this test called a “Thallium scan.” Your doctor has ordered sestamibi for you instead of thallium. Sestamibi makes clearer heart pictures in patients with larger-than-average chests. Your heart will be scanned twice: once after getting persantine and sestamibi, and again after getting sestamibi alone. A cardiologist evaluates your heart by comparing these two scans. They are usually scheduled on two consecutive days.

*If you have questions about the procedure, please ask. Your nurse, PA (physician’s assistant), and doctor are ready to assist you at all times.*

**Preparation**

1. Avoid caffeine for 24 hours before the test. This includes coffee, tea, colas, and other sodas such as Mountain Dew, as well as decaffeinated beverages and chocolate. Also avoid some over-the-counter pain relievers like Excedrin. Check labels to be sure. If you have had any caffeine on the morning of the test, please call the nurse at 301-496-3050 before you come to the hospital.

2. After midnight on the day of the test, do not eat or drink anything except water.

3. Do not take any medications on the morning of the test; please bring the medications with you.

4. Do not take Persantine (dipyridamole), Theodur, Theophylline, Albuterol, Trental, and Aggrenox.

5. Do not use nicotine products for at least 12 hours before the test.
6. If you are diabetic, do not take insulin or oral hypoglycemics the morning of your test. Please bring your insulin and other medications you will need, as well as your glucometer, to the test.

7. Wear a loose, comfortable, two-piece outfit and walking shoes (or sneakers). Avoid one-piece outfits and pantyhose. Women should wear bras (without underwire if possible).

Your health history may rule out your receiving persantine. To make sure that Persantine can be given to you safely, your nurse, PA, or doctor will ask you these questions:

- Do you have a history of asthma?
- Do you use inhalers?
- Do you have aortic stenosis (narrowing of the valve that lets blood out of your aorta)?
- Have you had a heart attack within the last month?
- Has your chest pain (angina) recently gotten worse or occurred more or less often?

Procedure (First floor Heart Station)

1. For the persantine test, you will be asked to lie back on a recliner or walk slowly on a treadmill. You will be connected to a cardiac monitor to check your heart rate and rhythm. An automatic blood pressure cuff will also be placed on one arm to measure your blood pressure. An intravenous (I.V.) catheter will be placed into one of your arm veins.

2. Persantine will be given through the I.V. over a period of 4 minutes. You may feel headache, flushing, shortness of breath, chest pain, nausea, or other symptoms. Let the staff know about these or other symptoms during or after persantine is given. Most patients feel no symptoms or very mild ones. Be assured that you will be monitored at all times. The doctor has medication to reverse uncomfortable side effects that do not go away quickly.

3. A few minutes after getting persantine, sestamibi will be injected through your I.V. You will feel nothing after this injection.

4. You will wait for about 30 to 60 minutes. During this wait time, you will be asked to eat something containing fat to clear your gallbladder of the sestamibi. After that time, you will be asked to lie very still on a flat table while a scanner takes pictures of your heart.

After the Procedure

1. When the pictures have been taken, you may eat and drink as usual and do your regular activities.

2. Over the next few hours, drink lots of water to help your body rid itself of sestamibi.
Resting scan Test location: Nuclear Medicine Department

Preparation
1. Report to the Nuclear Medicine Department on the first floor of the Clinical Center.
2. You may eat a light breakfast and drink non-caffeinated beverages.

Procedure
1. Sestamibi will be injected into your I.V. After the injection, you will wait for 30 to 60 minutes. During this wait time, you will be asked to eat something containing fat to clear your gallbladder of the sestamibi.
2. You will then lie on a flat table for about 40 minutes while pictures are taken of your heart.

After the Procedure
1. After the pictures have been taken, you may eat and drink as usual and do your regular activities, including driving.
2. Over the next few hours, drink lots of water to help your body rid itself of sestamibi.
3. Your referring doctor or your NIH doctor will give you the results.

Special Instructions
Please let your health care team know if you are pregnant, think you might be pregnant, or if you are breastfeeding. (We do pregnancy tests routinely on all women of child-bearing potential.) Because this test uses radioactivity, this test is not usually performed on pregnant or breastfeeding women. Also, if you care for a newborn, let your healthcare team know so that they may give you special instructions.