Persantine Thallium Scan

Outpatient instruction sheet Test location: 1st floor heart station

Note:

Please bring medications (including inhalers) you may need during your stay or in the hospital.

Patient Name Doctor

Test date

Test Time

- This time is reserved only for you. Please arrive promptly.
 You might want to allow time for parking and taking the elevator.
- If you need to cancel this test, call the Nuclear Medicine Department at 301-496-5675, or the exercise lab at 301-496-3050. Call either number if you have questions before the test.
- Your doctor wants you to stop taking the following heart medication(s) _____day(s) before the test.

Otherwise, it is usually okay to take your medications as usual. Call the exercise lab nurse if you have questions about medications.

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You are scheduled for a persantine thallium 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 thallium. 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. Thallium 201 is a radioactive compound that helps with scanning pictures. When Thallium goes to tissues with normal blood flow, they look light when they are scanned; tissues with poor blood flow look dark.

Thallium has about the same amount of radiation as a chest x-ray. Your heart will be scanned twice: once after you get persantine and thallium, and again after you rest about 2 hours. A cardiologist evaluates your heart by comparing these two scans.

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)

The testing period will be about 5 hours, so you might want to bring something to read. Your health history may rule out your receivin 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 a rtic 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 (1st 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 of 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, thallium will be injected through your I.V. You will feel nothing after this injection.
- 4. You will then be seated in a wheelchair and taken immediately to the Nuclear Medicine Department. There, your heart will be scanned.
- 5. The first scan: You will be helped to lie on a narrow table with your arms raised over your head. You will need to lie still for about 30 minutes while the camera scans your heart. After this scan, you can walk around freely for a while. You will be asked to return to the Nuclear Medicine Department in about 2 hours. (You will be given an exact time.) While you wait for the second scan, you must not eat, but you may drink water only.
- 6. The second scan: When you return to the Nuclear Medicine Department, you will get a second small dose of thallium followed by another scan. When the second scan is completed, your IV will be removed and you may return home and do your usual activities, including driving.

After the Procedure

- 1. Drink lots of water to help rid your body of thallium.
- 2. 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 health care team know so that they may give you special instructions.



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This information is prepared specifically for patients taking part in clinical research at the Clinical Center at the National Institutes of Health and is not necessarily applicable to individuals who are patients elsewhere. If you have questions about the information presented here, talk to a member of your health care team.

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