

## ADENOSINE OR PERSANTINE CARDIOLITE STRESS TESTING

**Technology:** Adenosine or Persantine Cardiolite Stress Testing is performed in the Nuclear Medicine Department.

**Purpose:** Stress testing is a diagnostic exam used to evaluate the supply of blood to the heart muscle. The heart receives blood from the coronary arteries. If these arteries become blocked or narrowed, your heart will not receive the blood that it needs for proper function. This test may be useful in detecting the presence and significance of coronary artery disease.

**Adenosine or Persantine:** Both of these stress agent medications are called vasodilators, which means, they dilate your blood vessels to make your heart work harder. An injection of either medication simulates what happens to the heart during exercise without you actually having to exercise.

**Nuclear Medicine** refers to the use of a small amount of a radioactive isotope called Cardiolite which is injected through an IV into the bloodstream. This radioactive isotope is detected by a special camera, making it possible to view your heart.

### **Preparation:**

- You **MAY NOT** take any medications containing **Theophylline (Xanthine)** for 48 hours before the test. This includes inhalers.
- You **MAY** take your other medications at your usual time, unless your physician has indicated otherwise.
- **Do not eat or drink anything 6 hours before your test**, with the exception of a small amount of water with your medications.
- No caffeine at least 12 hours before the test. This includes any decaffeinated or caffeinated products, such as: coffee, tea, chocolate, or medications containing caffeine. **Having caffeine will result in cancellation of your test.**
- Please notify the staff if you have an allergy to Adenosine, Persantine, or Aminophylline.
- Please inform the technologist if you are pregnant, suspect pregnancy or are currently breastfeeding.

### **What To Expect:**

Upon arrival to the Diagnostic Imaging Department, you will be greeted by the receptionist. She will inform Nuclear Medicine staff of your arrival. The Nuclear Medicine staff will then escort you to the changing area, where you will be asked to change into a hospital gown. The Nuclear Medicine staff or a Diagnostic Imaging Nurse will ask for your health history information and have you sign a consent form to perform the procedure. It will be necessary to then start an IV in your arm for the injection of the Cardiolite and stress agent. They will then obtain your vital signs, which include: blood pressure, pulse rate, and ECG. In order to obtain the ECG your skin will be prepped for the electrodes that are placed on your chest. These electrodes will be connected to a monitor so that your heart rate and rhythm can be watched closely throughout the test. The Nuclear Medicine staff will then inject the Cardiolite for your resting set of images. You will then be asked to lie very still on your back with your left arm above your head for approximately 20 minutes while the Nuclear Medicine camera rotates in an ark-like fashion around you. After the resting set of images are obtained, you will be escorted to the Stress Room. The ECG monitor and blood pressure cuff will be properly placed. An Internal Medicine physician will be present during this portion of

the test and can answer any questions you may have. You will then be given either the Adenosine or Persantine through your IV. Either medication may cause side effects which the staff will inform you. ***PLEASE INFORM THE STAFF IF YOU EXPERIENCE ANY OF THE SIDE EFFECTS THEY DESCRIBE TO YOU. These symptoms can be easily reversed.***

A few minutes after you receive the Persantine injection, you will receive another injection of Cardiolite. You will be asked to do some isometric arm exercises during this portion of the test. After this portion of the test is complete, the staff will remove all monitoring equipment and the IV. You may leave and have something to eat and drink. You will be asked to return approximately 1 ½ to 3 hour later. After your return, the Nuclear Medicine Technologist will escort you back to the Nuclear Medicine Suite where again you will be asked to lie down very still with your left arm above your head while your heart is imaged for a second time. This will be stress set of images and takes approximately 20 minutes. Your test is now complete.

You will be given discharge instructions and contact information should you have any questions or concerns. Your practitioner will contact you with results.

To obtain additional information regarding this study, log on to [www.range.fairview.org](http://www.range.fairview.org)