

## Cardio-Diagnostics – Nuclear Perfusion Study Information – Persantine Cardiolute Stress Test

A Persantine/Cardiolite stress test is most often performed when a patient is not able to complete a standard exercise stress test. This test involves both giving a drug that simulates exercise and the Cardiolute radioisotope. A scanning procedure will be done in the Nuclear Medicine Department. The scanning procedure will enable the physician to visualize areas of your heart which may not get an adequate blood supply during exercise and also areas which may have been damaged due to a previous heart attack. Note – this is a 2 part test.

### HOW SHOULD I PREPARE FOR THE TEST?

You may have a light breakfast the morning of the test but **no caffeine (tea, coffee, cola's or chocolate) or dairy products** 24 hours prior to your appointment time. **No fatty foods the morning of the test.** You should wear loose fitting clothing and soft rubber soled shoes (please avoid wearing sandals or heels, if possible). Do not stop any medication on your own without checking with your physician. You will be required to drink 2 cups of water after the Persantine/Cardiolite portion of the test (**it is recommended you bring your own water bottle for this**).

### WHAT HAPPENS DURING THE TEST?

An electrocardiogram (ECG) will be taken and your blood pressure and heart rate will be checked prior to the test. ECG electrodes will be attached to your chest and wires hooked to a monitor. An intravenous line (I.V.) will be inserted in your arm, which will be used to inject the Persantine and Cardiolute into your blood stream. This I.V. line will be removed after the first set of pictures are completed in the Nuclear Medicine Department.

A drug called Persantine is used to simulate exercise. It increases blood flow to your heart muscle and will be injected into the I.V. line in your arm. Your heart rate may rise and blood pressure may decrease. This is a normal response and it will be monitored along with your ECG.

Persantine may cause a flushed feeling, dizziness, palpitations or chest pain. If you experience any of these symptoms at any time during the test, immediately tell the technologist or physician so adjustments can be made. If your symptoms continue to worsen or persist, a drug called Aminophylline can be given to reverse significant side effects. **If you are asthmatic, please inform the technologist of this condition.**

The Cardiolute radioisotope will be injected approximately four minutes after the Persantine injections. The Cardiolute is carried by the blood to the heart muscle. If blood flow is limited due to Coronary Artery Disease (CAD) then the amount of Cardiolute in your heart muscle is reduced.

When the injections are completed you will be given a time to report to the Nuclear Medicine Department where the technologist will take pictures of your heart. The appointment time will be anywhere from 30 minutes to 3 hours later. You will be asked to lie down on a special table and a gamma camera that can detect radiation will visualize the Cardiolute which is in your heart muscle. The camera is positioned close to your chest and rotates slowly around you taking pictures as it moves. It take 15 minutes to take these pictures and it is important to lie as still as possible during this time to avoid blurring the images.

After the first set of pictures, you may leave the hospital. You must return at a time given to you by the Nuclear Medicine Technologist for another set of pictures. You will be given an appointment the day of the test for your return visit. The second appointment will require a repeat injection of Cardiolute followed by scanning approximately 1 hours later. The second set of pictures are compared with the first set to assess the blood supply to your heart after Persantine and at rest.

### **CANCELLATIONS OR RESCHEDULING**

***OSMH Central Scheduling requires 24 hours minimum notice of a request to cancel or reschedule an appointment***

If there are any questions about your appointment, please phone 705-325-2201 ext. 3151 with a minimum 24 hours' notice

**HOW LONG WILL THE TEST LAST?**

The first portion of the test lasts approximately one and a half hours to three hours. You may then leave the hospital, but you must return at a time given to you by the nuclear technologist for another set of pictures, which lasts about one and a half hours.

**HOW MUCH RADIATION IS INVOLVED?**

The injection of cardiolite results in a radiation exposure to your body of approximately 4.2 mGy. (Gy is a unit of measurement for radiation exposure). In comparison, the amount of radiation you already receive from all naturally occurring sources (food, air, water, ground and materials) is approximately 3.0 mGy.

**WILL I EXPERIENCE ANYTHING FROM THE RADIATION?**

The radiation you receive is not felt, seen, or smelled, nor does it make you or your clothing radioactive. However, you may briefly notice a metallic taste in your mouth for a few seconds after the injection.

**HOW LONG WILL THE CARIOLITE STAY IN THE BODY?**

The cardiolite decays and is excreted from the body by the kidneys within 48 hours without leaving any trace or effect.

**CAN I CONTINUE TAKING MY HEART MEDICATIONS AFTER THE TEST?**

Yes, unless instructed not to by the physician ordering the test.

**WILL I BE ABLE TO DRIVE AFTER THE TEST?**

Yes.

**ARE THERE ANY ADVERSE REACTIONS TO CARIOLITE?**

An adverse reaction to the cardiolite is extremely rare. Some examples of these reactions are transient headaches, flushing, nausea, rash, dry mouth and hypotension (decreased blood pressure).

**ARE THERE ANY CONTRA-INDICATIONS?**

If you are pregnant or there is a possibility you may be, or if you are breastfeeding, a cardiolite exercise test may be inappropriate for you at this time.