

## STRESS TEST AND CARDIOLITE STRESS TEST

### What are these tests?

A **stress test**, also called a treadmill or exercise tolerance test, is an exam that records your cardiovascular response to exercise - your heart rate, blood pressure, and EKG (electro-cardiogram) readings. During the test, you will walk on a treadmill at gradually increasing speeds and angle of incline.

In a variation known as a **cardiolite stress test**, a radioactive material or cardiolite is injected into a vein in your arm or hand while you exercise. After the cardiolite reaches your heart, you will be positioned so that a camera-like scanning device can record which areas are receiving adequate amounts of blood, and which are not.

There are usually no side effects with cardiolite and there is no danger to you from the small amount of radioactivity - about as much as you would receive in a chest x-ray. Alert your doctor, however, if you think you might be pregnant. Except in emergencies, a pregnant woman should not be exposed to even small amounts of radioactivity because it can harm the fetus. Also inform your doctor about any medications you are taking, especially heart medications, since they may affect your response to exercise and the interpretation of the test.

### Why am I having the exam?

In some cases, a stress test is part of a routine checkup. In others, it is used to help diagnose the extent of coronary artery disease, to evaluate the damage done by a heart attack, or to estimate the risk of a future heart attack or surgery. It can also help evaluate symptoms you have been having, such as chest pain, fatigue, palpitations, or shortness of breath.

It is also done to check the effects of medications or surgery on your heart and to determine your capacity for exercise. The goal of the test is to get your heart working at the maximum rate considered safe for a person of your age, and then see how it tolerates the exertion.

If your doctor has scheduled a cardiolite stress test, he is looking for more detailed information about the flow of blood to your heart and your body's response to monitored exercise.

### How do I prepare for the test?

Your doctor will explain the exam and its risks. **Do not eat or drink anything for two hours before the test.** Ask your physician whether you should continue taking your regular medications. Wear comfortable, loose-fitting clothes and walking shoes or sneakers. We ask if you bring someone with you, please **limit to only 1 person** due to limited waiting room space.

### What happens during the test?

You will go to a testing room or nuclear medicine area where the staff will monitor your condition at all times. A physician, nurse, C.V. tech and/or nuclear medical tech are present in the department at all times during the exercise portions of your stress test.

You will be asked to undress from the waist up and put on a hospital gown. Sticky electrode pads will be placed on your chest, and a blood pressure cuff will be wrapped around your arm.

If you are having a cardiolute test, a staff member will ask your height and weight. A small intravenous catheter will be inserted in your arm or hand.

Tell the staff if there are limitations on your ability to exercise - if you have back or knee trouble, for example, or a prosthetic limb. Also let them know if you are unable to lie with your arms above your head for any length of time.

Before starting the exercise portion of the test, a staff member will take three EKG readings: one while you are lying down, another standing, and a third after you have been breathing rapidly for 15 seconds. Your blood pressure will probably be taken while you are lying down and standing.

You will then begin to walk slowly on the treadmill, which is usually set at a slight incline. Walk with a steady, even gait, and keep your eyes open. Approximately every three minutes the speed and elevation of the treadmill will be increased. Your heart's activity will be monitored constantly and your blood pressure checked periodically.

If, at any time, you experience discomfort in your chest (burning, aching, pain, or tightness), or if you feel nauseated, exhausted, dizzy, or faint, let the staff know immediately.

Alert staff members when you feel the need to slow down or stop. They will try to decrease the speed of the treadmill gradually. Afterwards, you will be asked to lie down on a table, where another EKG and blood pressure reading will be taken. When you have rested for a few minutes, the EKG pads and blood pressure cuff will be removed, and you will be allowed to get dressed.

### **If you are having a cardiolute test:**

After the initial injection, you will wait approximately one hour in the waiting room with your IV left in place.

This will be followed by a 20 minute set of pictures after which you will walk on the treadmill and at your peak stress level, be given the second injection.

The IV is then removed and you have another 45 minutes to one hour wait. During this interval, you may eat, however, we encourage you to bring something to eat rather than leave the department. After this waiting period, a 15 minute set of pictures will be taken and your test is complete.

### **How long does the test take?**

A basic stress test takes up to an hour, depending on your level of endurance. **(The actual exercise time is 3 - 15 minutes, depending on your ability.)**

A cardiolute stress test takes about 3 - 3 1/2 hours from beginning to end, counting the interval between picture-taking sessions.

### **What about afterwards?**

After a basic stress test, you can go home immediately and resume your normal activities, assuming that you feel well.

If you feel dizzy, weak, or are having any chest discomfort, let the staff know.

After a cardiolute test, you will probably be instructed not to exercise strenuously for the rest of the day.

The staff will give you written instructions as to when your test results will be available.