

IV DOBUTAMINE - CARDIOLITE STRESS TESTING

What is a Dobutamine Stress Test?

Dobutamine is a medication that is used in order to chemically stress the heart. This test is performed on patients who are unable to walk on a treadmill and achieve a diagnostic heart rate. It may also be ordered by your physician due to current lung problems or disease - this would enable the patient to be off specific medications for the test.

Dobutamine is a medication that increases both heart rate and blood pressure, much like walking on a treadmill would do.

Patients may experience side effects from this medication. These side effects may include: heart racing, chest pain or pressure, increase in blood pressure and headache. These symptoms, if they should occur, should be reported to the technician immediately.

Cardiolite, the radioactive agent, usually has no side effects. The amount of exposure to the radioactivity is minimal. However, if you think that you may be pregnant - notify the technician at the start of the test.

Why am I having this test?

This test has been ordered by your physician in order to detect the possibility of coronary artery disease. It also helps to assess patients with known coronary artery disease, i.e. recent heart attack or recurrent chest pain. Your doctor may also order this test due to an upcoming surgery that you will be having. This information will tell him whether or not you are at risk for a possible heart attack and, if so, additional measures will be taken in order to help prevent possible heart disease.

How do I prepare for the test?

Your physician will instruct you not to eat or drink anything for 4 - 6 hours prior to the test. You may take your daily medications unless otherwise instructed by your physician. You may wear comfortable shoes and clothing.

What should I expect during the test?

The test will begin by a technician starting an IV in the patient's arm or hand. At that time, a small injection of cardiolite, the radioactive agent, will be injected through the IV. The technician will then ask you to wait in the waiting room for approximately 1 hour. This waiting period allows the cardiolite to settle in the normal portions of the heart muscle while the heart is at rest.

The technician will then place you under a nuclear camera. This camera allows the heart muscle to be visualized. The camera will scan the heart for about 20 minutes.

After the initial 20 minute scan, the dobutamine portion of the test will begin. The technician will ask you a series of questions, such as your height, weight, any history of heart problems, i.e. heart attack, arrhythmias, etc. It is important that you bring a list of current medications that you are on so that the technician has an accurate list.

The technician will then place several patches (electrodes) on your chest. This is in order to monitor your heart rate and any changes that may occur on your EKG during the test. The technician will also take frequent blood pressures throughout the test.

A nurse will begin to infuse the dobutamine very slowly through the IV you initially received. Every 3 minutes the nurse will increase the dose of dobutamine until the desired heart rate is achieved. If, at any time, you experience any side effects, please inform the nurse.

When the desired heart rate is achieved, a second dose of cardiolite will be injected. At that time, the nurse will discontinue the infusion of dobutamine, in order to allow for the heart rate to decrease. The technician and nurse will monitor you for approximately 10 minutes after the infusion of dobutamine.

The patient will then be asked to wait in the waiting room for an additional 1 hour. This waiting period is needed in order to allow the cardiolite to settle in the normal portions of the heart muscle at stress.

After the second waiting period, the patient will be scanned again under the same nuclear camera. These scans will be compared to the initial rest images. Your physician will compare these scans and make his interpretation as to your risk of coronary heart disease and future treatment.

How long does the test take?

The test takes approximately 3 ½ - 4 hours from the initial injection to the final set of pictures.

How long does the test affect me?

You may resume your normal daily activities immediately after the test, assuming that you feel well enough.