

DOBUTAMINE STRESS ECHOCARDIOGRAPHY

About the Dobutamine Stress Echocardiogram

A Dobutamine Stress Echocardiogram is a test used to determine if you have coronary artery disease (blockage in the arteries that supply blood to the heart). It can also be used to monitor your progress if it is known that you already have heart disease. This process combines an echocardiogram along with the infusion of IV dobutamine. Dobutamine is a medicine that exercises the heart muscle and increases the heart's blood flow and oxygen supply.

When you exercise using your arms and legs, blood flow and oxygen supply to the heart is increased, when given dobutamine, it gives us the same response without you having to walk on a treadmill or physically become active. Sometimes your doctor orders this test because you may not be able to exercise long enough on a treadmill in order to produce appropriate test results.

This dobutamine stress echo will provide your doctor with valuable information, which is routinely not available by having a treadmill test or an echocardiogram alone.

Special instructions before the test:

1. You may eat a light meal 4 hours before the test.
2. Diabetic patients should follow their normal meal pattern.
3. Bring a list of your current medications with you.
4. This test takes approximately 1 hour.

During the Dobutamine Stress Echo test

Cardiology staff will examine your electrocardiogram (ECG) readings to look for signs / symptoms or changes in the ECG that may indicate blockage in your coronary arteries.

You will be asked to undress from the waist up and put on a patient gown. Patches (electrodes) and wires (leads) will be applied to your chest to monitor your electrocardiogram (ECG). The nurse will insert an IV in your arm to give the medication.

The dobutamine infusion will begin at a slow rate and then will be increased gradually over time. Your heart rate, blood pressure, ECG, and comfort level will be monitored continuously. While you are receiving this medicine you may begin to feel your heart beating harder and faster, and chest pain may occur. If these symptoms occur, they will go away in just a few minutes after the medication is stopped, however, we do want you to tell us how you are feeling during the time. The medication portion of the test will last approximately 15 minutes. Your ECG and blood pressure will be continuously monitored after the medication is stopped until your heart beat is at a resting level and you are feeling comfortable.

The echocardiogram procedure is performed while you are lying on an examination table, usually on your left side before and throughout the dobutamine administration. A transducer, a small instrument resembling a microphone, is moved over the chest. This transducer emits high frequency sound waves which creates an image of your heart at rest and how well it is pumping blood through the chambers as the dobutamine stimulates the heart to exercise or beat faster.

What the Dobutamine Stress Echo test reveals

Abnormal motion of a portion of your heart muscle that may indicate blockage in the coronary arteries which supply that area of the heart. If there has been a previous attack, these abnormalities may be seen at rest. If an artery is partially blocked, but there has been no heart damage, motion of the heart muscle wall is usually normal at rest, but may be temporarily abnormal during and immediately following exercise.

Going home

Under most circumstances, you may leave immediately after the completion of the test as long as you are feeling well. It is not necessary for you to bring someone with you to drive you home, but please feel welcome to do so if this would make you feel more comfortable.