

## **Dobutamine Stress Echo**

### **Why is the doctor performing the test?**

To determine if there is a blockage, or abnormality, of your coronary (heart) arteries, or evidence of heart weakness.

### **What is the test?**

A Dobutamine Stress Echo is a non-invasive ultrasound test which is used to visualize the heart in motion. The doctor will examine the muscle movement of the heart (also called wall motion) while you are at rest. Then, you will receive a medication called dobutamine through the IV. This causes your heart to beat faster, simulating the effects exercise has on your heart. The doctor will then examine these pictures of your heart and compare them to the pictures taken while you were at rest. This test is often done for patients who are unable to exercise or can only exercise for short periods of time on the treadmill.

If the results of your stress echo show decreased muscle movement (or wall motion) during stress, this may be indicator that there is plaque build up (atherosclerosis) in your arteries. The doctor will determine if any other testing is necessary to ensure that your heart is functioning properly.

### **What is Dobutamine?**

Dobutamine is a positive inotropic agent and chronotropic agent, meaning it increases the contractility of the heart and the heart rate. When dobutamine is administered you may feel your heart pound for a few minutes. This is normal. However, you may also experience side effects such as chest pain/pressure, headache, dizziness, and nausea, shortness of breath, shaky, warm and flushed. If you begin to notice these symptoms or other symptoms that concern you, notify the doctor immediately.

If you are pregnant or suspect that you may be pregnant, you should notify your physician due to risk of injury to the fetus from a dobutamine stress echo. If you are breast feeding, you should notify your physician.

Most patients do not experience any side effects. Dobutamine has a short duration of activity, so its effects do subside quickly.

### **What does the test show?**

A Dobutamine Stress test evaluates the function of your heart under stress; in particular, it examines the left ventricle (the main pumping chamber of your heart). This test provides the following valuable information:

1. Assess for coronary artery disease, or the impact of previously diagnosed coronary artery disease.
2. Whether the symptoms you experience (chest pain, shortness of breath, unexplained fatigue, dizziness, etc.) are caused by a blockage to your heart.
3. Possible heart troubles that is not present at rest.
4. As a tool to evaluate patients prior to surgery.
5. To approximate the severity of the blockages to your heart.
6. Following balloon angioplasty or bypass surgery (for those who require these procedures), a stress test may help to determine the success of the procedure and a appropriate rehabilitation program for you.

### **How do I prepare for the test?**

1. Do not eat or drink anything 4 hours prior to the test, except water. This helps prevent nausea and vomiting- possible side-effects which may accompany the infusion of Dobutamine. Diabetics and those who need to eat/drink with medication(s) must get special instructions from their doctor.
2. Do not smoke or take caffeine 4 hours prior to the test. They may interfere with the test results.
3. Wear a two-piece outfit for women, and men are asked to remove their shirt.
4. Do not put on oils or lotions before the test. Small sticky patches (electrodes) will need to stick on your chest.
5. You will be asked to empty your bladder prior to the procedure.
6. Please check with your doctor before taking the following heart medications on the day of your test.
7. Such medications may include:

Beta Blockers e.g., Tenormin, Lopressor,Propranolol)

Isosorbide dinitrate (e.g., Isordil, Sorbitrate)

Isosorbide mononitrate (e.g., Ismo)

Nitroglycerin (e.g., Deponit, Nitrostat)

8. If you have any questions about medications you take, talk to your physician.
9. Please try to arrive 15-20 minutes prior to your scheduled appointment time.

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

Approximately 45 minutes:

Prep: 10-15 minutes

Testing: 15 minutes

Recovery 10-15 minutes