

## **What is a Dobutamine Stress Echo Test?**

Why do I need a stress test?

This test helps your physician determine how your heart functions when it is made to work harder by injecting dobutamine. Dobutamine is a drug that has an effect on the heart similar to exercise. This test is done on patients that are unable to exercise adequately or have severe lung disease. An echocardiogram, the ultrasound study of the heart, evaluates the heart's size, how strongly it pumps blood, and how well the valves are working.

### **The dobutamine stress echo test is useful to determine:**

- If there is a decreased supply of blood and oxygen to the heart at rest as well as with exercise
- If there is reduced movement of the heart muscle.
- Overall level of cardiovascular conditioning
- How quickly the heart recovers after exercise
- How hard the heart can work before symptoms develop
- Estimate the risk of surgery that can cause cardiac complications

### **What happens during the test?**

- An echo technician will do a resting scan of your heart while you are lying down on an exam table. You will lie on your back and on your left side.
- A stress lab technician will prep ten small areas on your chest and place electrodes (small, flat, sticky patches) on these areas. The electrodes are attached to an EKG monitor that charts your heart's electrical activity during the test.
- You will be lying down on an exam table while the technician performs a resting EKG and blood pressure.
- A nurse will place an IV into a vein in your arm or hand. Next, your heart will be "stressed" by injecting a medication called dobutamine into the IV. This medication will increase your heart rate.
- Please tell the technician immediately if you have chest pain, shortness of breath, or any other unusual symptoms at any time.
- The stress lab staff will watch for any changes on the EKG monitor that suggest the test should be stopped. The testing area is supervised by a physician.
- The echo technician will take images of your heart every three minutes during the test.
- At the peak effects of dobutamine, a second echocardiogram will be taken to visualize the heart's motion with exercise.
- Your heart rate, blood pressure, and EKG will continue to be monitored until the levels are returning to normal. One more echo scan will be done as your heart rate returns to normal.