

# Dobutamine Stress Echocardiogram

## What is a dobutamine stress echocardiogram?

An echocardiogram (echo) is a test used to assess the heart's function and structures. A stress echocardiogram is a test done to assess how well the heart works under stress. The “stress” can be triggered by either exercise on a treadmill or medication called dobutamine.

## Before your Stress Echo

- Generally, you will be told not to eat or drink for at least 3 hours before the test. If you have diabetes and take medication for it, you will need special instructions from your doctor.
- If you take heart medication, check with your doctor when you schedule your test. Some heart medications (**especially Beta Blockers**) can affect the results. You may be asked to stop such medications a day or two before the test.
- Make sure to wear a two-piece outfit. You may need to undress from the waist up and put on a short hospital gown.

## What Happens During the Test?

The dobutamine stress echo is usually performed at the hospital, or clinic. The test consists of two parts: a resting echo and dobutamine infusion.

### ▪ Resting Echo

You will be asked to remove clothing from the waist up. Several electrodes (small sticky patches) will be placed on your chest to obtain an ECG and monitor your heartbeat. An intravenous (IV) line will be inserted into a vein in your arm.

You then lie down on a bed, or an exam table to improve the quality of the pictures, a technologist applies a colorless gel to the area where the transducer will be placed.

The technologist then moves the transducer over the chest to obtain the desired images.

### ▪ Dobutamine Infusion

Dobutamine is infused slowly into the vein, and the dose is increased every few minutes. As the drug is given, it is normal to feel your heart pound for a few minutes. In addition, you may experience chest pressure, headache, dizziness, nausea, or shortness of breath. Be sure to let the doctor or technologist know how you feel. The symptoms go away quickly when the infusion is stopped. Additional medication may be given to slow your heart rate back to normal.

Additional sets of echo images are taken during and after the infusion of dobutamine. Doctors then compare the images (before, during and after the dobutamine infusion has been stopped) side by side to see how your heart responds to the stress induced by the drug.

