

# Guide to Dobutamine Stress Cardiac Testing with Echocardiogram



A dobutamine stress echocardiogram combines an ultrasound study of the heart with an infusion of an adrenaline-like substance (dobutamine) that stresses the heart in a way that is similar to the effect of exercise. This test, which is used for patients who are unable to walk on a treadmill, provides information on how the heart functions when it is made to work harder, and is especially helpful in diagnosing coronary heart disease. Ultrasound (high frequency sound waves not heard by the human ear) is used to make pictures of your heart before and after dobutamine treatment.

## Pre-Registration and Testing Location

Plan to arrive 20 minutes before the scheduled time of your test. Bring your hospital and insurance cards with you. Check in at the front desk in main lobby. Dobutamine Stress Echocardiograms are performed at:

### MISH

11217 Lakeview Ave., Lenexa Kansas 66219  
913-322-7408

## Before the Dobutamine Stress Echocardiogram

- Please refrain from smoking for at least 4 hours before your test.  
You will need to avoid taking anything with caffeine for 3 hours before the test, including: coffee or tea (even decaffeinated), chocolate, or sodas. Medications that contain caffeine should be also held for 3 hours. Some over-the-counter medications that contain caffeine include Anacin, Excedrin, and NoDoz. Consult your physician for specific instructions.
- Fasting (No food or liquids) is required for 6 hours before the procedure.
- Do not take alcohol for 24 hours before the test.
- You will be asked to sign a consent form that gives your permission to perform the test. Read the form carefully and ask questions if something is not clear.
- If you are pregnant or suspect that you may be pregnant, you must notify the staff.
- Notify the staff of all medications (prescription and over-the-counter) and herbal supplements that you are taking.
- Notify the staff if you have a pacemaker or defibrillator
- Do not apply lotions, oils or powders to the chest area.

## During the Dobutamine Stress Echocardiogram

The test is usually performed in a darkened room. A hollow tube called an intravenous line will be inserted into a vein. You will be asked to lie on your back, your left side, and/or sit up. A lubricating gel will be applied to the skin over the heart area. A small smooth instrument (called an echo transducer) is moved and/or tilted gently across your chest, in various positions during the exam. The transducer picks up the sound waves from your heart and a live image of your heart will be displayed on a TV monitor. At times during the exam you will hear a "swishing" sound (called Doppler) coming from the machine. This is the blood flow as it moves through the heart valves.

After initial pictures of your heart is recorded, dobutamine will be infused at a low dose to increase your heart rate and forcefulness of the heart beat for several minutes before ultrasound recordings are made again. This may be repeated several times to see if the heart develops evidence of inadequate blood supply at higher levels of stress. You may feel jittery or experience a sense of chest tightness during the procedure. The test time is approximately 45-60 minutes.

Generally, during the stress test scan:

- You will be asked to remove any jewelry or other objects that may interfere with the pictures of your heart.
- You may be given a gown to wear.
- An intravenous catheter will be placed in your arm or hand.
- You will be connected to an ECG machine with leads and a blood pressure cuff will be placed on your arm.
- If you experience any symptoms such as chest pain, shortness of breath, dizziness or severe fatigue at any point during the procedure, let the physician, nurse or technologist know.