

Dobutamine Stress Echocardiogram

What Is It?

A Dobutamine stress echocardiogram, or DSE, is a combined echocardiogram and stress test. It is used to evaluate how well your heart responds to an increase in heart rate when unable to walk on the treadmill. Your heart rate is increased as if you were exercising by a drug known as Dobutamine. This test is similar to a "stress echo" in that it can help the cardiologist determine the cause of symptoms such as: chest, jaw, arm discomfort, or shortness of breath. It can also aid the cardiologist on evaluating the strength of your heart before surgery, after surgery, or after a heart attack.

What Will Happen During the Test?

Before the procedure begins, a nurse or physician will start an intravenous (IV) line in one of your arms.

- A medication called Dobutamine will be given to you through this IV and into a vein. This medication mimics exercise by increasing the heart rate and the amount of blood and oxygen the heart needs to function.
- When the medication is given, you will begin to feel your heart rate increase. As your heart rate increases with each dose of dobutamine your blood pressure, heart rate, and EKG will be monitored the entire time. If your heart monitor or blood pressure shows abnormal changes along with any chest pain, the test will be stopped immediately and we may give another medication to reverse the dobutamine.
- Before, during, and after you are given the dobutamine, moving images of your heart are recorded via ultrasound by a trained, certified, and experienced cardiac sonographer.

These sets of images are analyzed by a Cardiologist to evaluate your heart's response to increasing work. You may feel short of breath, nauseous, anxious, shaky, and have hot flashes. These are common side effects of the medication.

How Do You Prepare for the Test?

You will be asked to do the following prior to your Dobutamine stress test:

1. If you have a pacemaker or defibrillator you will need an appointment for your device to be reprogrammed for your stress test. Do not eat or drink 4 hours before the test
2. Wear comfortable clothes preferably 2 piece outfit
3. If you are on beta-blockers you will be told to hold them
4. If you take a 24-hour release beta-blocker do not take it 24-hours before.
5. If you take the beta-blocker in the morning do not take it the morning of the test.
6. If you take a 12-hour release beta-blocker do not take it 12-hours before.
7. If you are diabetic insulin-dependent take half your dose before test and then the remaining half afterwards.
8. Bring a list of your medications

The total test takes about 60-90 minutes. You may eat after the test. Your physician should inform you of the result.