DOBUTAMINE STRESS ECHO TEST

The dobutamine stress echo test involves the injection of a medication called dobutamine while you are closely monitored. The medication stimulates your heart in a similar way as exercise.

Why is this test performed?

The test is used to evaluate your heart and valve function when you are unable to exercise on a treadmill or stationary cycle. The test is used to:

- Determine how well your heart tolerates activity
- Determine your likelihood of having coronary artery disease
- Evaluate the effectiveness of your cardiac treatment plan

Can I eat or drink on the day of the test?

- Yes. However, **DO NOT eat or drink anything except water for 4 hours** before the test.
- **DO NOT SMOKE ON THE DAY OF THE TEST**, as nicotine will interfere with the results of your test.

Should I take my medications before the test?
**Heart Medications**

**DO NOT take these heart medications for 24 hours before the test, unless your physician tells you otherwise, or if it is needed to treat chest discomfort:**

Beta blockers [for example: atenolol (Tenormin), carvedilol (Coreg), metoprolol (Lopressor, Toprol), Propranolol (Inderal)]

- Isosorbide dinitrate (for example: Dilatrate, Isordil, Sorbitrate)
- Isosorbide mononitrate (for example: Ismo, Imdur, Monoket)
- Nitroglycerin (for example: Minitran, Nitropatches, Nitrostat)
- Your physician may also ask you to stop taking other heart medications on the day of your test.
- Bring your medications with you the day of the test.

If you have any questions about your medications, ask your physician.

**NOTE: Do not discontinue any medication without first talking with your physician.**

**Guidelines for People with Diabetes**

If you take insulin to control your blood sugar, ask your physician what amount of your medication you should take the day of the test. Often, your physician will tell you to take only half of your usual morning dose and to eat a light meal 4 hours before the test.

If you take pills to control your blood sugar, do not take your medication until after the test is complete. **Do not take your diabetes medication and skip a meal before the test.** If you own a glucose monitor, bring it with you to check your blood sugar levels before and after your test. If you think your blood sugar is low, tell the lab personnel immediately. Plan to eat and take your diabetes medication following your test.

**What should I wear on the day of the test?**

You may wear anything you like. Before the test, you will change into a hospital gown. Please do not bring valuables with you the day of the test. You will be given a locker to store your belongings during the test.

**What happens during the test?**

- Your test will take place in the **Echo Lab.** The testing area is supervised by a physician.
- First, a cardiac sonographer will gently rub ten small areas on your chest and place electrodes (small, flat, sticky patches) on these areas. The electrodes are attached to an electrocardiograph (EKG) monitor that charts your heart's electrical activity during the test.
- An intravenous line (IV) will be inserted into a vein in your arm so the dobutamine medication can be delivered directly into your bloodstream.
- The sonographer will perform a resting EKG, measure your resting heart rate and take your blood pressure.
- The sonographer will ask you to lie on your left side on an exam table so he or she can perform a resting echocardiogram (also called an "echo"). An echocardiogram is a graphic outline of the heart's movement created from ultrasound vibrations echoed from the heart's structures. The sonographer will place a wand (called a transducer) on your chest to view an outline of the heart's movement. Images will be taken periodically throughout the test.
- The physician or nurse will administer the dobutamine medication into the IV while the technician continues to obtain echo images.
The medication will cause your heart to react as if you were exercising: your heart rate will rise and you may feel it beating more strongly. It may cause a warm, flushing feeling, and in some cases, a mild headache.

- At regular intervals, the lab personnel will ask how you are feeling. Please tell them if you feel chest, arm or jaw pain or discomfort, short of breath, dizzy, lightheaded or any other unusual symptoms.
- The lab personnel will watch for any changes on the EKG monitor that suggest the test should be stopped.
- The IV will be removed from your arm once the test is completed. Your heart rate should return to normal in about 5 to 10 minutes.

**How long does the test take?**

The appointment will take about 60 minutes. The actual infusion time is usually about 15 minutes. You should plan to stay in the waiting room for at least 30 minutes after completing the procedure, or until all of the symptoms you experienced have resolved.

**How do I get the results of my test?**

After a cardiologist has reviewed your test, the results will be entered into your electronic medical record. Your physician will have access to the results and will discuss them with you.