Stress Echocardiogram

What Is It?

A stress echocardiogram is an echocardiogram that is performed when the heart is at rest and again just after the heart has worked hard. This test requires the use of exercise to increase heart rate, and the amount of blood and oxygen the heart needs to function. You will be asked to walk on a treadmill for this test. The stress echocardiogram lets the physician see the structures of the heart and evaluate how well the heart performs when stressed. During this test, the heart must work harder than during rest. When the heart rate is increased, the demand for blood and oxygen is also increased. If the heart does not receive enough blood during the exercise or when stressed, the heart's functioning will be reduced. This will be evident on an echocardiogram. Exercise testing is an important diagnostic and prognostic procedure in the assessment of patients with ischemic heart disease. Ischemic heart disease refers to the presence of blockages or narrowing involving the arteries that supply blood to the heart. This test can also help the cardiologist determine the causes of symptoms such as: chest, jaw, and arm discomfort, or shortness of breath. It may be used in certain other heart conditions as well.

What Will Happen During the Test?

There are two parts to the test. First you will have a regular echocardiogram by a trained, certified, and experienced cardiac sonographer. Then a heart monitor and blood pressure cuff will be attached so that your heart rate and blood pressure can be observed during the second part of the test. During part two, the following will occur: You will be asked to walk on a treadmill. As you walk your heart rate will increase. After reaching your target heart rate the treadmill will be stopped. While your heart rate is increased you will be assisted onto an examination table and another echocardiogram will be performed. However, if you feel shortness of breath, dizziness, chest pain, or your blood pressure or heart monitor shows any changes the treadmill will be stopped immediately. These sets of images are analyzed by a Cardiologist to evaluate your hearts response to increasing work.

How Do You Prepare for the Test?

You will be asked to do the following prior to your 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.
- 2. Do not eat or drink: 2 hours before the test.
- 3. Wear comfortable clothes
- 4. Wear sneakers to walk on the treadmill
- 5. If you are on beta-blockers you will be told to hold them
- 6. If you take a 24-hour release beta-blocker do not take it 24-hours before.
- 7. If you take the beta-blocker in the morning do not take it the morning of the test.
- 8. If you take a 12-hour release beta-blocker do not take it 12-hours before.
- 9. If you are diabetic insulin-dependent take half your dose before test and then half after.
- 10. Bring a list of your medications

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