



## STRESS ECHOCARDIOGRAPHY

### What it is

A stress echocardiogram is a graded exercise stress test (GXT) combined with ultrasound of the heart (echocardiography). It is performed to assess how well your heart responds to exercise and to determine whether there is evidence of lack of blood flow to your heart muscle because of coronary artery disease (CAD). You will meet our technologist or sonographers in the waiting room and they will provide you with a gown in which to get ready.

You will need to remove all your clothes from the waist up and wear the gown open to the front like a coat. The risk of the procedure is the same as that of a stress test: 1 in 10,000 of any major complications. You will be asked to sign a consent form.

### Performance/Preparation

Once you are in the gown, the sonographer and technologist will place electrodes (adhesive patches) on your chest to monitor your heart rhythm, heart rate. After that, you will be instructed to turn on your left side and using a transducer with ultrasound gel, resting images will be taken of your heart. Images are taken to determine your resting heart function and how well the walls contract in addition to how well your valves open and close.

A resting electrocardiogram (ECG) is then performed by applying more electrodes to the chest in addition to blood pressure and heart rate. This will be monitored throughout the stress test. If applicable, an intravenous (IV) may be inserted to use a contrast agent to visualize the walls of your heart better. Rarely, there may be some irritation to the skin from the gel but this is very uncommon. Please do not wear scented perfumes or powders and the test cannot be performed while wearing a Holter monitor.

We ask that you wear comfortable clothes and shoes and that you not eat or drink 3 hours prior to the procedure as well as avoid caffeine for 6 hours prior to the test. You will exercise on the treadmill to your maximum effort before lying back on the bed for more ultrasound pictures of your heart at peak exercise and recovery. Your heart rate, BP and symptoms ECG will be recorded during the stress test and into recovery. The ultrasound images at peak stress will require some pressure on your chest with the transducer.

### Duration

The examination will take about 1 hour. Our sonographers are not allowed to discuss findings with you and your cardiologist or your primary care physician can provide you with the results of the testing.

### Medications

Your cardiologist or primary care physician may ask you hold any heart-rate slowing medications (beta-blockers, calcium channel blockers) such that we can get your heart rate up for the test. Please take your usual medications unless otherwise instructed by your physician.

### Driving

There are no restrictions to driving either commercially or privately after a stress echocardiogram.