STRESS ECOCARDIOGRAPHY

Recording Your Heart’s Response to Exercise
What Is Stress Echocardiography?
Stress echocardiography, or stress echo, is an imaging test. The resulting image, called an echocardiogram, shows the structure and movement of the heart. With a stress echo, images are taken before and after the heart is stressed to increase heart rate. By comparing images, your doctor can see changes in the way your heart muscle works when made to beat harder and faster. The images can be used to find a blocked coronary artery or to evaluate the effects of a procedure. Exercise is usually used to increase heart rate, but medication is sometimes used instead.

How Stress Echo Works
During a stress echo, a transducer (a small device that produces sound waves) is placed on your chest. The sound waves bounce off your heart and are changed into images on a screen.

A transducer produces harmless sound waves that bounce (echo) off the heart. The echo is used to produce an image.

The resulting image shows the structure and movement of the heart muscle.
Before Your Stress Echo

Having a stress echo is simple and causes little or no discomfort. For best results, prepare for the test as instructed. On the day of your test, arrive a few minutes early. You’ll need a little time to check in. Remember:

• Don’t eat for 3 to 4 hours before the test.
• Stop taking certain medications the day of the test, if so directed.
• Allow 1 to 2 hours from arrival to the time you can leave.
• Wear a two-piece outfit and shoes that are comfortable for walking.
• After checking in, you’ll be asked to undress from the waist up. You’ll be given a hospital gown to wear.

Don’t eat, drink, smoke, or have any caffeine for 3 hours before the test. Coffee, tea, cola drinks, chocolate, and some over-the-counter pain relievers contain caffeine. If you have diabetes, ask what you can eat before the test.
Electrodes will be placed on your chest for an electrocardiogram (ECG). This test records the pattern of your heartbeat. Then a technician places a transducer at several sites on the left side of your chest. While you lie on an exam table, images of your heart at rest are recorded. Your blood pressure is also monitored.

Next, you will walk on a treadmill or pedal a stationary bike. Your blood pressure and heart rate will be monitored. Right after you stop exercising, a second set of heart images is recorded. The doctor then compares the sets of images to learn more about the way your heart functions at rest and after exercise.
If your health prevents you from exercising, a medication called dobutamine can be used to increase your heart rate. This medication is given through an IV line placed in your arm. Once the medication has taken effect, images may be recorded every 2 to 3 minutes.

Tell Your Doctor
Be sure to tell your doctor if you feel any of the following during the test:

- Pain in your chest, arm, or jaw
- Irregular heartbeat
- Shortness of breath
- Dizziness or headache
- Fatigue

After Your Test
When the test is done, you can return to your normal routine. Ask your doctor about resuming any medication you were told to skip before the test.

Special Note
Stress echo is noninvasive and involves little risk. Your doctor will discuss any possible risks of exercise or the use of dobutamine with you.
Finding Out the Results

Your doctor will discuss the results of the test with you. This may happen right after the test or at a later time. The information gained from stress echo helps your doctor form a treatment plan that’s best for you. Depending on the results of stress echo, your doctor will decide whether you need any other tests.