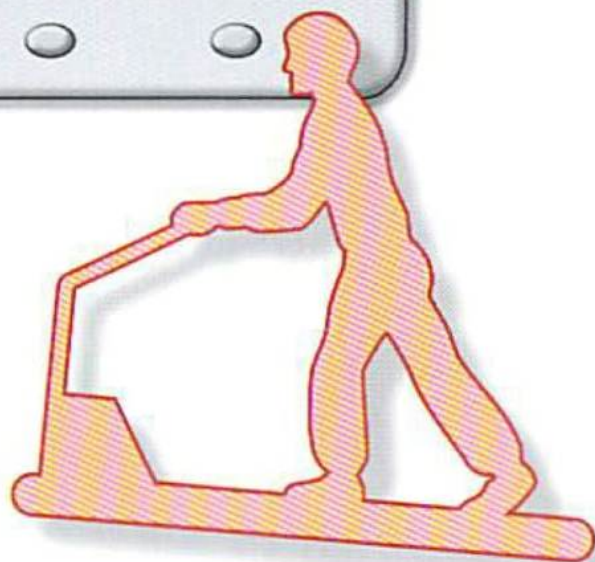
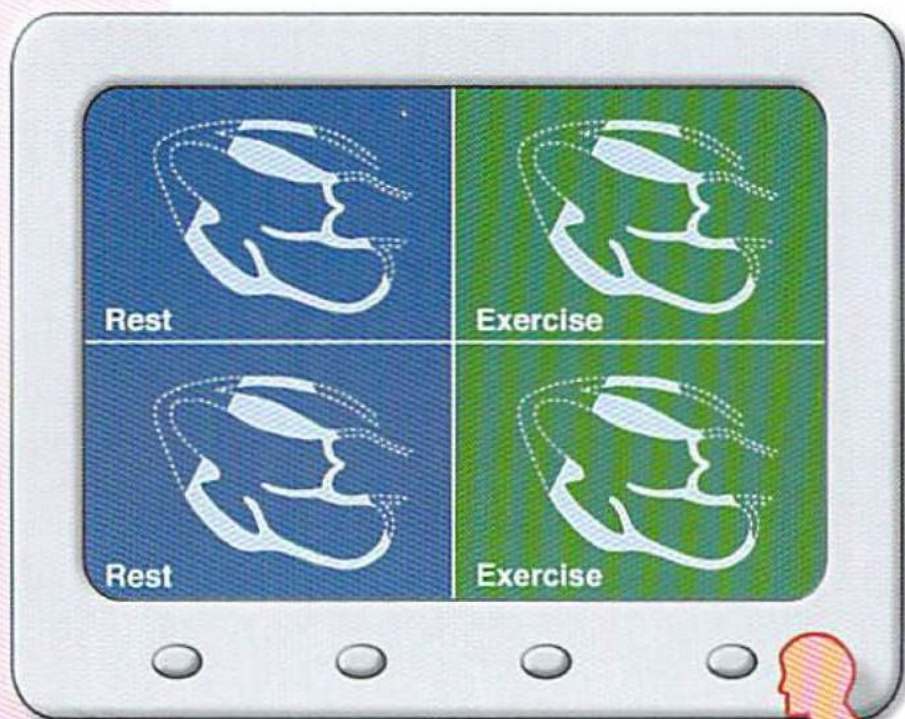


# Exercise Echo



*A Patient's Guide*

---

## What Is an Exercise Echo?

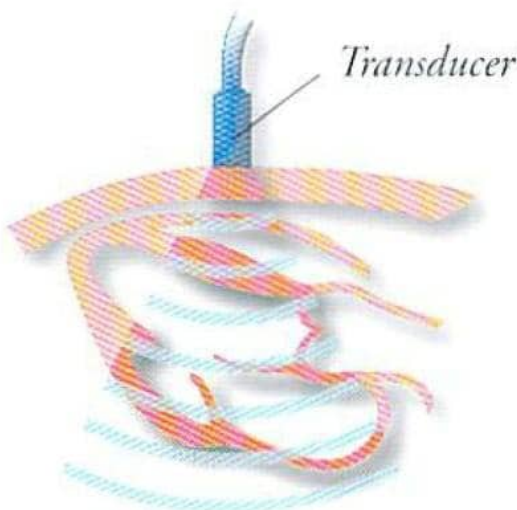
An **exercise echo**, also called a stress echo, combines an echocardiogram with an exercise test. It allows doctors to learn how well your heart works when it is made to beat harder and faster.

The exercise echo is particularly useful in diagnosing coronary heart disease, which is caused by narrowed or blocked **coronary arteries** (the vessels that supply blood to the heart muscle).

## What Does the Test Show?

An **echocardiogram**, or echo, uses ultrasound (high-pitched sound waves) to create images of the heart. The echo is a safe and painless test that helps doctors diagnose many kinds of heart problems.

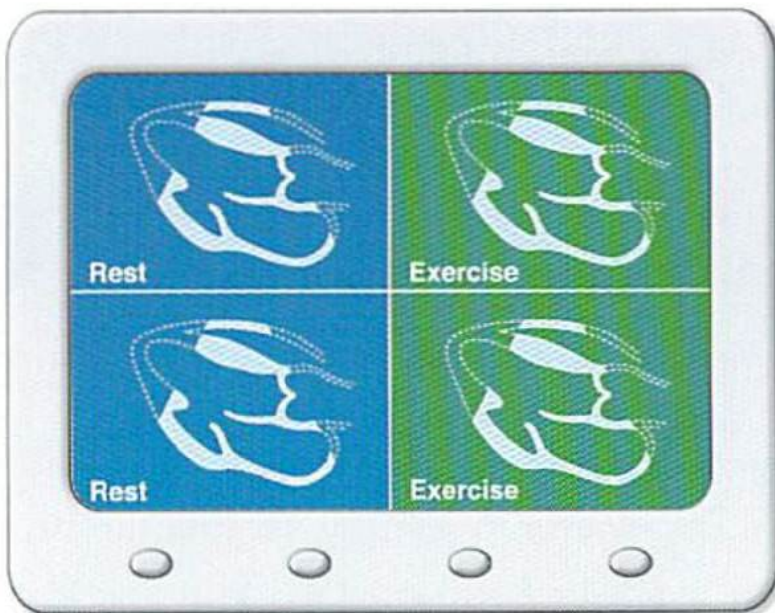
During an echo test, a small microphone-like device, called a **transducer**, is held against your chest. The transducer sends ultrasound waves that bounce off the various parts of the heart.



*Echo image*

The transducer picks up the reflected echo waves and sends them to a computer. The computer turns the echoes into moving images of your heart. The images are displayed on a monitor screen and can also be recorded on video.

An echo is first done while you rest, then again after you exercise. Doctors then compare the rest and exercise images side by side.



Normally, all areas of the heart muscle pump harder during exercise. If an area of your heart muscle does not pump as well as it should after exercise, it may not be receiving enough blood because of a narrowed or blocked coronary artery.

The exercise echo shows which areas of the heart do not receive enough blood supply; it does not show the actual blockages in the coronary arteries. If your doctor suspects narrowed or blocked arteries, he or she may recommend other tests.

## Why Is an Exercise Echo Done?

An exercise echo is most often done to help diagnose coronary heart disease. The problem may not show up at rest, when the heart is beating normally. With exercise, however, the heart does not get enough blood, and abnormal echo images appear.

An exercise echo may also be done to measure how severe coronary heart disease is, to assess the results of coronary procedures (such as balloon angioplasty and bypass surgery), and to diagnose certain types of heart muscle or heart valve disease.

### Before Your Exercise Echo

- Generally, you will be instructed not to eat or drink for at least 3 hours before the test. If you have diabetes and take medication for it, ask your doctor for special instructions.
- If you take heart medications, check with your doctor when you schedule the test. He or she may ask you to stop certain medications a day or two before the test.
- Wear comfortable clothing and shoes that are suitable for exercise. Women usually wear a loose-fitting blouse or hospital gown.
- The procedure will be explained to you and you will be asked to sign a consent form. Feel free to ask any questions you may have.

## What Happens During the Test?

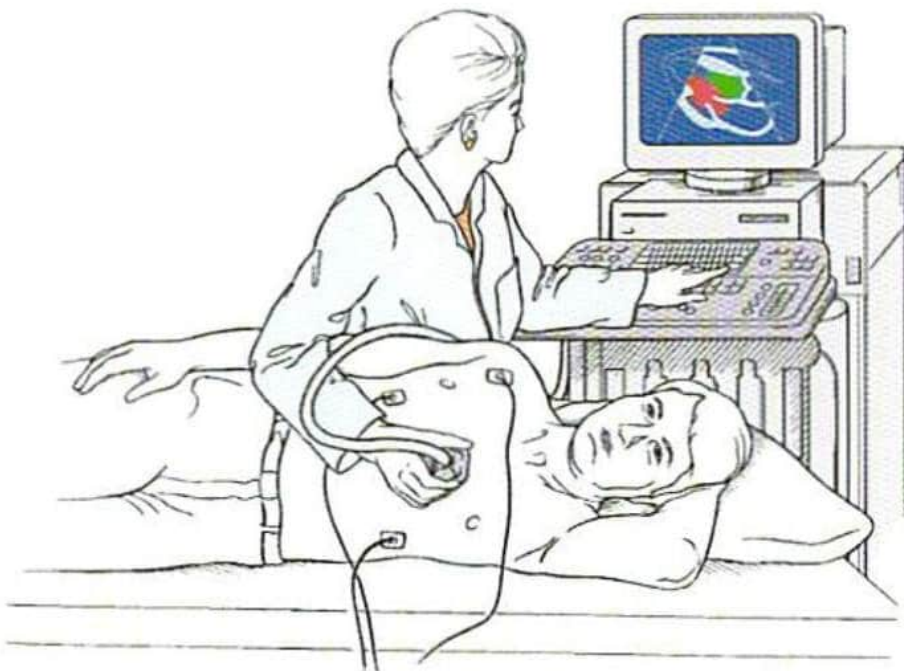
The exercise echo can be performed at a hospital, test center, or doctor's office.

The test is divided into three parts: (1) First, a resting echo is done. (2) Next, you walk on a treadmill or pedal a stationary bicycle. (3) Then, another echo is done soon after you finish exercising.

### ■ *Resting Echo*

You will be asked to remove clothing from the waist up (women will be given a short gown to wear). Several electrodes (small sticky patches) will be placed on your chest to monitor your heartbeat.

You then lie down on a special bed or exam table. To improve the quality of the pictures, a technologist applies a colorless gel to the area where the transducer will be placed. The gel may feel cool and moist, but it will be wiped off at the end of the test.

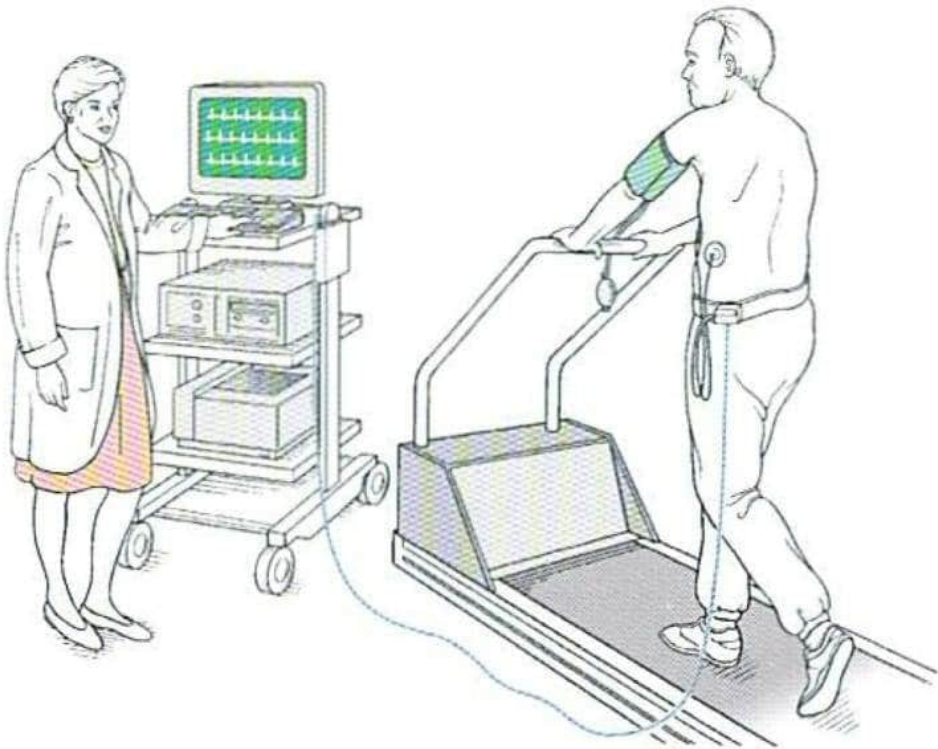



The technologist places the transducer on your chest and uses a small amount of pressure to obtain the desired images. You may be asked to breathe slowly or hold your breath. The images are displayed on the screen and recorded on video. They will be compared to images taken right after exercise.

### ■ *Exercise Test*

You either walk on a treadmill or pedal a stationary bicycle. The treadmill starts slowly, then the speed and incline are gradually increased. If you use a stationary bicycle, it feels easy to pedal at first, then it gradually gets harder.

You will be asked to report any symptoms you feel, such as chest or arm pain, shortness of breath, leg fatigue, or dizziness. The doctor will end the test when your heart beats fast enough, when you get too tired, or when you experience symptoms.





### ■ *After-Exercise Echo*

You will be helped back to the bed or exam table. The technologist will record a second set of images soon after you finish exercising, while your heart is still beating fast.

Doctors then compare the two sets of images (before and after exercise) side by side to see how your heart responds to the stress of exercise (see page 3).

.....

You should allow one to two hours for the entire test, which includes preparation, the exercise portion, and the echo imaging.

### **Is the Exercise Echo Safe?**

The echo test is very safe. There are no known risks from the ultrasound waves.

The exercise test is also safe. A small amount of risk does exist, however, because the heart is stressed. Possible rare complications include abnormal heart rhythms and a heart attack.

### **Your Test Results**

The doctor conducting the test may be able to give you preliminary test results before you leave. Your own doctor will discuss the final test results with you during a future office visit.

The information gained from the exercise echo helps your doctor accurately diagnose your condition and develop the treatment plan that is best for you.

Put your heart in the right place



**HEART**  **&**  
**VASCULAR**  
**SPECIALISTS**

Specializing in :  
Interventional Cardiology &  
Peripheral Vascular Disease

Phone : (800) 247-0309  
Fax : (800) 336-7779  
[www.247HVS.com](http://www.247HVS.com)

Todos los derechos reservados. Prohibida cualquier forma de  
reproduction total o parcial de esta publicacion sin el permiso  
expreso de la editorial.