#### Stress Testing for Heart Failure Patients

#### What Is Exercise Stress Testing?

Exercise stress testing can help your doctor find the right treatment for your heart failure. This test tells your doctor whether your heart is getting enough oxygen when you exercise and how much exercise you can do safely.

The stress test can show other heart problems as well, such as fast or slow heart rates, skipped beats, or abnormal blood pressure changes. If problems are found, your doctor can treat them.

### What Happens in the Exercise Stress Test?

If you are able to walk well for a few blocks, you will be able to do the stress test on a treadmill. The treadmill will start slowly and then gradually increase speed until you need to rest or until the technician sees problems with your heart or blood pressure. Treadmill tests can be done safely even if you are very weak.

The technician who runs the test will talk to you about how much exercise you can handle. If you can't walk easily or safely, you can use an exercise bicycle for the test.

While you are doing the test, you will be hooked up to equipment that monitors your heart beats and measures your blood pressure. You might also be asked to breath into a tube for a few minutes.

If you feel that the exercise is becoming too difficult for you, you can ask to stop the test at any time.

After the exercise part of the test is over, you will sit or lie down to see how long it takes your heart to return to a normal or resting state.

# What If You Cannot Exercise Easily?

If you cannot exercise easily, the technician may give you an easier exercise test combined with another special test. This special test may be either an ultrasound or nuclear (noo KLE er) isotope (EYE suh tohp) imaging. These techniques give the technician another way to see, or "visualize," how your heart is pumping during exercise and to see if there are any problems with the flow of blood to your heart.

These techniques are also used to check the oxygen supply to your heart. Your doctor may want to see whether you have something called "ischemia" (ih SKI mi uh).

The ultrasound test can see areas of the heart that beat abnormally when the area is not getting enough blood. It can also see a heart valve problem and the effect that the valve problem has on the flow of blood through your heart.

Nuclear isotope tests are also used to detect areas of the heart that are not getting enough blood. In these tests, something called a "tracer," like a dye, is injected into your vein. Then you lie down under a special camera that can see how the tracer is moving through your heart. This can show areas where the blood flow to your heart is decreased.

## What If You Cannot Exercise at All?

If you cannot exercise at all, a stress test is still important to see how your heart is pumping and whether there is decreased oxygen supply to your heart. Medications can be used instead of exercise during testing.

# What If You Cannot Exercise at All? continued

These medications cause your heart to react in the same way it does when you exercise or exert yourself. They are usually combined with the ultrasound or nuclear isotope tests to find areas of the heart that are not getting enough blood.

#### Glossary

Term	Pronunciation	Definition
Ischemia	ih SKI mi uh	An inadequate supply of blood to a part of the body, caused by partial or total blockage of an artery
Nuclear Isotope Imaging	noo KLE er EYE suh tohp	A technique used to create a visual image of the body or its function