

Greenwich Hospital

What is a Stress Test?

PATIENT/FAMILY INFORMATION SHEET

What is a stress test?

A stress test is performed to assess how the heart responds to the demands of physical activity. It can help your doctor to diagnose heart problems that may not be apparent when your heart is at rest.

Are there different types of stress tests?

There are several different types of stress tests. Your doctor will order the procedure that will best diagnose your condition.

1. Exercise Electrocardiogram (ECG) Stress Test: During this form of stress test, you will walk on a treadmill while your heart beat is being monitored. The cardiologist will examine the ECG readings to help determine changes in your heart rhythm, decreased blood flow to your heart, or other heart conditions.

This is a safe, non-invasive test that takes about 30 minutes. **Do not eat or drink 4 hours prior to the test.** Your doctor will give you directions concerning which of your medications you should or should not take the morning of the test. Pills can be taken with sips of water.

2. Exercise Echocardiogram: This test combines a regular echocardiogram with walking on a treadmill. An echocardiogram uses ultrasound waves to create images of the heart. An echocardiogram is first performed at rest while you are lying down. You will then be asked to walk on a treadmill while your heart beat and blood pressure are being monitored. A second echocardiogram is then done immediately after the exercise portion of the procedure. The cardiologist will then compare the resting echocardiogram with the exercise echocardiogram results. This tests helps the cardiologist to determine what areas of your heart are not getting enough blood supply and changes in your heart beat.

This is a non-invasive test that takes about one hour. **Do not eat or drink 4 hours prior to the test.** Your doctor will give you directions concerning which of your medications you should or should not take the morning of the test. Pills can be taken with sips of water.

3. Dobutamine Stress Echocardiogram: This test combines an echocardiogram with a stress test using the medication Dobutamine. This type of stress test is ordered if you are unable to exercise on the treadmill. The Dobutamine is given to you through an intravenous line put in your arm. This medication causes your heart to pump faster and harder as if you are exercising. An echocardiogram is done before the medication is given while your heart is at rest, and then after the medication while your heart is pumping harder. This test also helps the cardiologist to determine what areas of your heart are not getting enough blood supply and/or changes in your heart beat.

This test takes about one hour to perform. **Do not eat or drink 4 hours prior to the test.** Your doctor will give you directions concerning which of your medications you should or should not take the morning of the test. Pills can be taken with sips of water.

4. Myoview Stress Test: This test uses a radioactive tracer to examine blood flow to the heart while you are at rest and exercising. This will help the cardiologist to diagnose coronary artery disease, which is a narrowing or blockage of the arteries that supply blood to your heart. You will have an intravenous line put into a vein in your arm, and then you will have electrodes similar to an electrocardiogram attached to your body. You will then be asked to walk on a treadmill while a small amount of the radioactive tracer is injected into the intravenous line. This tracer has a small amount of radiation that is detected by a scanning camera. One set of images is taken while you are exercising and one set is taken while you are at rest. This form of stress test allows the cardiologist and radiologist to identify areas of reduced blood supply to your heart and scarring from any previous heart attacks.

This test takes about 3 hours to perform. There will be a break for approximately one hour between the resting and exercise images. You may have a light meal during this break. **Do not eat or drink for 12 to 24 hours (as ordered by your doctor) prior to the test. If you are diabetic, you may require additional instructions regarding your diet and medications prior to and after the test.** Your doctor will give you directions concerning which of your medications you should or should not take the morning of the test. Pills can be taken with sips of water.

5. Persantine Myoview Stress Test: This type of stress test is ordered if you are unable to exercise on the treadmill. Persantine is a medication that mimics the effects of exercise on the heart. The medication is given through an intravenous line that is put in a vein in your arm. Once the Persantine has been given, a small amount of the radioactive tracer is

injected into the intravenous line. This tracer has a small amount of radiation that is detected by a scanning camera. One set of images is taken while you are exercising and one set is taken while you are at rest. This form of stress test allows the cardiologist and radiologist to identify areas of reduced blood supply to your heart and scarring from any previous heart attacks.

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Is there any special preparation for the stress test?

In addition to the instructions listed under each test, the following instructions should be considered:

- Do not drink any products containing caffeine 24 hours prior to any stress test (such as coffee, tea, Mountain Dew and cola sodas). Caffeine acts as a stimulant on your heart and will make it beat faster and will increase your blood pressure.
- If you take any heart medications or theophylline medications, such as Theodur, aminophylline, check with your doctor when you schedule your test. You may be asked to stop certain medications one to two days prior to the test.
- Wear comfortable clothing and shoes that are suitable for exercise. Women are advised to wear a loose-fitting blouse, or they may be given a hospital gown to put on.
- You will be asked to sign a consent form prior to the procedure.

If you have any questions regarding your test, feel free to speak with the cardiology nurses.

For more Patient Fact Sheets, see the Greenwich Hospital web site at www.greenhosp.org and Click on Patients & Visitors, then Patient Education