PACIFIC COAST CARDIOLOGY & RESEARCH

PATIENT PRE-TEST INSTRUCTIONS:

Stress Test: Treadmill Stress Test

1. Patient should not take Beta-blockers for 24 hours prior to testing.
   Patients with chronic Atrial Fibrillation are to continue taking their Beta-blockers.
2. Nothing to eat for 2 hours prior to the exam; may have water.
3. No lotion to the chest area.
4. Wear tennis shoes and comfortable clothing.

***YOU SHOULD NOT STOP ANY MEDICATIONS WITHOUT CONTACTING YOUR PRESCRIBING DOCTOR. USE THE FOLLOWING LIST IN ORDER TO SPEAK WITH YOUR DOCTOR:

Commonly Used Beta Blockers: Blocadren (timolol), Coreg (carvedilol), Inderal (propranolol), Lopressor (metoprolol), Tenormin (atenolol), Toprol –XL (metorprolol), Trandate (labetalol), Visken (pindolol), Bystolic.

Caffeinated Food and Beverages: Coffee including "decaffeinated", teas, cocoa and any food containing cocoa (chocolate), and soft drinks.

Exercise Stress Test

An exercise electrocardiogram (EKG or ECG) is a test that checks for changes in your heart while you exercise. Sometimes EKG abnormalities can be seen only during exercise or while symptoms are present. This test is sometimes called a "stress test" or a "treadmill test." During an exercise EKG, you may either walk on a motor-driven treadmill.

An exercise EKG translates the heart's electrical activity into line tracings on paper. The spikes and dips in the line tracings are called waves.

A resting EKG is always done before an exercise EKG test, and results of the resting EKG are compared to the results of the exercise EKG. A resting EKG may also show a heart problem that would make an exercise EKG unsafe.

Why It Is Done

An exercise electrocardiogram is done to:

Help find the cause of unexplained chest pain.

Check for some types of heart disease.

See how well people who have had a heart attack or heart surgery are able to tolerate exercise.

Help find the cause of symptoms that occur during exercise or activity, such as dizziness, fainting, or rapid, irregular heartbeats (palpitations).

Check for a blockage or narrowing of an artery after a medical procedure, such as angioplasty or coronary artery bypass surgery, especially if the person has chest pain or other symptoms.

See how well medicine or other treatment for chest pain or an irregular heartbeat is working.

Help you make decisions about starting an exercise program if you have been inactive for a number of years and have an increased chance of having heart disease.

How To Prepare

Tell your doctor if you:

Are taking any medicines, including a medicine for an erection problem (such as Viagra). You may need to take nitroglycerin during this test, which can cause a serious reaction if you have taken a medicine for an erection problem within the previous 48 hours. Ask your doctor whether you need to stop taking any of your other medicines before the test.

Are allergic to any medicines, such as those used to numb the skin (anesthetics).

Have had bleeding problems or take blood-thinners, such as aspirin or warfarin (such as Coumadin).

Have joint problems in your hips or legs that may make it difficult for you to exercise.

Are or might be pregnant.

Talk to your doctor about any concerns you have regarding the need for the test, its risks, how it will be done, or what the results will indicate.

Remove all jewelry from your neck, arms, and wrists. Wear flat, comfortable shoes (no bedroom slippers) and loose, lightweight shorts or sweat pants. Men are usually bare-chested

during the test. Women often wear a bra, T-shirt, or hospital gown. Avoid wearing any restrictive clothing other than a bra.

You may want to stretch your arm and leg muscles before beginning an exercise EKG.

How It Is Done

An exercise electrocardiogram (EKG or ECG) is usually done in a doctor's office, clinic, or hospital lab by a health professional or doctor.

Before the test

Areas on your arms, legs, and chest where small metal discs (electrodes) will be placed are cleaned and may be shaved to provide a clean, smooth surface to attach the discs. A special EKG paste or small pads soaked in alcohol may be placed between the discs and your skin to improve conduction of the electrical impulses, but in many cases disposable discs are used that do not require paste or alcohol.

The electrodes are hooked to a machine that traces your heart activity onto a piece of paper. Your chest may be loosely wrapped with an elastic band to keep the electrodes from falling off during exercise. A blood pressure cuff will be wrapped around your upper arm so that your blood pressure can be checked every few minutes during the test.

During the test

For exercise, you will either walk on a treadmill or pedal on a stationary bicycle while being monitored by an EKG machine. Your EKG will be monitored on screen, and paper copies will be printed out for later review before you start the exercise, at the end of each section of exercise, and while you are recovering. The test is usually performed in a series of stages, each lasting 3 minutes. After each 3-minute stage, the resistance or speed of the treadmill is increased.

For the treadmill test, the treadmill will move slowly in a level or slightly inclined position. As the test progresses, the speed and steepness of the treadmill will be increased so that you will be walking faster and at a greater incline.

In both the treadmill, your EKG, heart rate, and blood pressure will be recorded during the exercise. Your heart rate and EKG will be recorded continuously. Your blood pressure is usually measured during the second minute of each stage. It may be measured more frequently if the readings are too high or too low.

The test continues until you need to stop, until you reach your maximum heart rate, until you begin to show symptoms of stress on your heart and lungs (such as fatigue, extreme shortness of breath, or angina), or until the EKG tracing shows decreased blood flow to your heart muscle.

The test may also be stopped if you develop serious irregular heartbeats or if your blood pressure drops below your resting level.

After the test

When the exercise phase is completed:

You will be able to sit or lie down and rest.

Your EKG and blood pressure will be checked for about 5 to 10 minutes during this time.

The electrodes are then removed from your chest, and you may resume your normal activities.

Do not take a hot bath or shower for at least an hour, since hot water after vigorous exercise can make you feel dizzy and faint.

The entire test usually takes 15 to 30 minutes.

How It Feels

The electrodes may feel cool when they are put on your chest. If you have a lot of hair on your chest, a small area under each electrode may need to be shaved. When the electrodes are taken off, they may pull your skin a little.

The room where the exercise electrocardiogram is done may be kept cool for comfort, since you will warm up rapidly when you begin to exercise.

The blood pressure cuff on your arm will be inflated every few minutes. This will squeeze your arm and feel tight. Tell your health professional if this is painful.

While exercising, you may have leg cramps or soreness; feel tired, short of breath, or lightheaded; have a dry mouth; and sweat. You might even have some mild chest pain. Tell the health professional or doctor if you have these symptoms.

Risks

An exercise electrocardiogram is generally safe. Emergency equipment will be available in the testing area. Risks include:

Irregular heartbeats during the test

Severe chest pain (angina)

Fainting

Falling.

Heart attack.

The electrodes are used to transfer an image of the electrical activity of your heart to tracing on paper. No electricity passes through your body from the machine, and there is no danger of getting an electrical shock.

Results

An exercise electrocardiogram (EKG or ECG) is a test that checks for changes in your heart while you exercise. Your doctor may be able to talk to you about your results right after the test. However, complete test results may take several days.