

CARDIAC STRESS TEST (EXERCISE / PHARMACOLOGIC / STRESS ECHO)

A diagnostic procedure used to measure the heart's ability to respond to external stress in a controlled clinical environment. At Chinatown Cardiology, P.C., heart stimulation is either provided by exercising on a treadmill or injection of intravenous vasodilators such as adenosine or dobutamine. The latter is usually used when you have medical problems that prevent you from being able to complete the necessary exercise; this is called a pharmacologic stress test. Stress tests are useful in comparing the coronary circulation of a patient while at rest with the patient's circulation during maximum exercise capacity. Findings will show any abnormal blood flow to the heart's muscle tissue and provide information about the patient's physical condition or symptoms.

Oftentimes, stress tests can help diagnose coronary heart disease (CHD), a condition in which plaque builds up in the coronary artery. These arteries supply oxygen-rich blood to your heart. Plaque buildup causes narrowed arteries (incomplete perfusion) and blood clot formation (arterial blockage). Blocked arteries may cause chest pain or angina.

Stress echocardiography or exercise echocardiogram: This non-invasive test consists of a stress test accompanied by an echocardiogram. The echocardiogram is performed both before (baseline) and after (peak heart rate) the exercise. Structural differences and wall motion are compared. Ischemia of one or more coronary arteries could cause wall motion abnormalities, indicating coronary artery disease.

Nuclear stress test: Commonly known as "myocardial perfusion imaging." This procedure utilizes the distribution of an intravenous dose of radiotracer (Tc-99m Sestamibi or Thallous Chloride 201) to capture images of the blood flow using a special camera. Photos are taken before and after exercise to assess the patient's arteries. The radioisotopes found within the heart muscles help identify areas of reduced blood flow within the heart muscles.

During these exams, you will be closely monitored by healthcare personnel at our facility to ensure you are well.

Who needs it?

A stress test may be ordered for you if:

- You have been experiencing chest pains or shortness of breath to evaluate cardiac status.
- You feel lightheaded, faint, or fast heart beat during exercise.
- You have been diagnosed with CHD or recently had a heart attack to monitor progression of disease.
- You recently had an angioplasty with or without stent placement to monitor improvements after treatment.

What to expect before, during, and after?

BEFORE	<p>Because a portion of the exam consists of brief exercise, you should wear shoes and clothes that are comfortable to exercise with. If needed, we can provide a gown to wear during the test. You will also be asked to fast (not eat or drink anything but water) beginning at least 3 hours prior to the exam. In addition, you cannot drink coffee or any caffeinated drinks for at least a day before the test.</p> <p>You may also be asked to stop certain medications prior to the test. Your doctor will discuss this with you.</p>
DURING	<p>During the test, sticky patches will be placed on the skin of your chest, arms, and legs. The electrodes are connected to an EKG machine which will record your heart's electrical activity (heart rhythm and rate) during the test. Your blood pressure will also be monitored during the duration of the test.</p> <p>If you have no problem with light physical</p>

	<p>exercise, you will be asked to walk along a treadmill. If you cannot exercise, medicine may be injected into a vein in your arm or hand to help increase blood flow through your arteries and to make your heart beat faster, <i>simulating exercise</i>. When one of the following criteria are met, exercise or infusion stops:</p> <ul style="list-style-type: none"> - Reached target heart rate - Feel moderate or severe chest pains - Feel too short of breath to continue - Develop abnormally high or low blood pressure - Become dizzy / faint <p>Your heart function and blood pressure will continue to be monitored until it returns to normal baseline levels.</p> <p>For stress echocardiograms: When sufficient exercise is performed, you will be asked to lay down on an exam bed for an echocardiogram be a technician.</p> <p>Nuclear stress test: A nurse will inject a small amount of radioactive dye into your blood stream approximately half hour prior to exercise or medicine that helps your heart work harder. No worries, the amount of radiation in this dye is safe for you and those around you. However, if you are pregnant or think you may be pregnant, you must let the doctors know. Pictures will be taken of your heart at least twice – at rest and after stress. You will be asked to sit on a seat attached to a special scanner that detects the dye in your bloodstream.</p>
AFTER	<p>After the stress test, you may return to your normal activities. It is advisable to drink lots of fluids after the nuclear stress test to wash out the dye. If you are planning to travel right after the procedure, please notify your doctor.</p>

Are there any risks I should be aware of?

Stress tests have relatively few risks. Some side effects may include:

- Low blood pressure causing dizziness or faint
- Jitteriness or discomfort while getting m