Nuclear Stress Testing – Patient Information Sheet

What is a stress test?
A stress test is used by doctors to diagnose heart disease. If your doctor wants you to have a stress test, you may have symptoms of heart disease or certain risk factors for it. Not everyone who has a stress test has heart disease. Your test results can help your doctor determine if you have disease or if you may be at risk for a heart attack.

Why does my doctor want me to have this test?
There are several reasons you may be asked to have a stress test with a nuclear scan

Your doctor suspects you may have heart disease and wants to confirm it. Your doctor may suspect coronary artery disease if you have chest pressure or other symptoms. Having certain risk factors such as high blood pressure or family history of heart disease could also increase your chance of having coronary artery disease. It's important to be tested, because some people with heart disease feel no symptoms at all.

Your doctor already knows you have heart disease and wants to monitor your condition. If you have already been diagnosed with heart disease, your doctor may ask for a stress test to:

- Look for any heart damage you may have
- Track the progress of your condition and assess your risk for problems in the future
- Determine how well your treatment is working

A stress test with nuclear scanning provides information about how well blood is flowing to your heart and how well your heart is working.

How does the test work?
A test with nuclear scanning usually consists of taking pictures of your heart in two phases: a stress phase and a resting phase.

Where are stress tests given?
Stress tests are given in special offices called nuclear medicine or nuclear cardiology labs. The labs may be in hospitals or in outpatient offices.

Who performs stress tests?
Stress tests are performed by healthcare providers specially trained to give them. Your test may be given by a qualified healthcare provider such as a doctor, nurse, or technologist.

How long will the test take?
Stress tests may be completed in 1 day or on 2 separate days. Normally, the test takes 2 to 4 hours to complete. If your test is done on 2 separate days, it will take about 2 hours each day.

How should I prepare for the test?
Follow your doctor's advice when preparing for the test. He or she may tell you:

- Not to eat or drink for several hours before the test.
  Patients with diabetes may receive special orders.
- Not to take some of your medicines before the test.

Your doctor will tell you which ones not to take.

- To avoid caffeine for 24 hours before the test.
  Caffeine may affect your results.

When you make your appointment, the staff at the lab may offer even more advice. For example, they may tell you to:

- Bring a list of all your medicines with you. The staff will ask you to name all the medicines you take, even the ones you may not be taking on that day.
- Wear loose, comfortable clothing for the exercise phase of the test. Wear footwear with non-skid soles, too.
- You may be asked to exercise as hard as you can, and these items may increase your comfort.

What will happen during the stress phase of the test?

A stress test is used by your doctor to determine whether or not you have heart disease. Your stress test may contain two phases, a resting phase and a stress phase. Your doctor will inform you of the order of the phases.

To begin, the staff will place a small IV line in your arm. During the test you will be injected with medicine through this IV line. You may also have small pads (known as electrocardiogram or ECG electrodes) attached to your body. The pads will allow the staff to monitor your heart rate. The stress phase of the test depends on the type of stress used:

If you are able to exercise:

You will exercise on a treadmill or bicycle. When you reach your peak exercise level, you will be injected with a nuclear isotope The nuclear isotope will travel through your bloodstream to your heart. Speak up right away if you become short of breath, feel pain in your arm or chest, or get tired at any time during the test.

If you are unable to exercise:

You will be given medicine through the IV line. This medicine will affect your heart in a way that is similar to exercise. You will also be injected with a nuclear isotope. The nuclear isotope will travel through your bloodstream to your heart. Speak up right away if you become short of breath, feel pain in your chest, or feel any other symptoms at any time during the test.

Whether your stress is from exercise or a drug, the last part of the stress phase is the same. You will either be lying down on a table or sitting in a chair while a type of camera called a gamma camera takes images of your heart. The camera "sees" the nuclear isotope in your heart and uses it to help create the pictures of your heart.

What will happen during the resting phase of the test?

The resting phase may occur before or after the stress phase, as determined by your doctor. The nuclear isotope will be injected while you are resting. After that, more pictures will be taken. This set of pictures will show the flow of blood through your heart at rest.

How will I receive my test results?

The doctor at the lab will compare your two sets of pictures and send a report to your doctor. Your doctor will then discuss the results with you.