



Nuclear Stress Testing



Overview

This test maps blood flow through the heart while you are at rest and while you are doing physical activity. It can show problems with the structure and function of your heart. And, it helps diagnose heart disease or other problems.

Preparation

First, electrodes are placed on your chest, legs and arms. They are connected to an electrocardiogram machine. It detects and records the electrical signals of your heart.

Raising the heart rate

Now, the test begins. Your heart rate is gradually increased. You may walk on a treadmill or ride a stationary bike to raise your heart rate. Or, your physician may use an injection of drugs to stimulate your heart. When your heart reaches a target rate, a radioactive substance is injected into your bloodstream.

Examining the active heart

Next, your chest is scanned with a gamma-ray camera. It detects the radioactive substance in your heart tissue. Images on a monitor show your heart's chambers and how well your heart is performing. The scan shows areas that aren't getting enough blood because of a blockage.

Examining the heart at rest

When the exercise part of the exam is complete, you relax. Your heart returns to its resting rate. The injection and scan are repeated. This lets your doctor compare images of your active heart to your heart at rest.

End of procedure

After the second scan, you can go home and resume normal activities. The radioactive substance is not harmful to you or others. And, it will be flushed from your body naturally. Ask your doctor for more information.