

Cardiac SPECT

What is a SPECT Scan?

A Single Photon Emissions Computed Tomography (SPECT scan) is a type of nuclear medicine test. A radioactive material (isotope) and a special camera (gamma camera) are used to determine the function of an organ. A cardiac SPECT evaluates the coronary arteries for diseased or damaged vessels.

Why is it done?

A cardiac SPECT is done to examine the blood flow through the coronary arteries. In addition, a cardiac SPECT can evaluate heart muscle function as well as identify any scarring of the cardiac tissue. Blood flow through coronary arteries is typically adequate during a state of rest. When the body is stressed (exercise) such as jogging on a treadmill, blood flow is significantly reduced. Comparing the rest and the stress images side by side will help a physician identify any existing blockages or scarring.

Patient preparation

Be sure to tell your health care provider if you are, or think, you may be pregnant. You will be asked not to eat or drink anything after midnight before your exam, and to refrain from caffeinated food and beverages 24 hours before your test. You will be instructed to stop blood pressure medications/beta blockers 24 hours prior to exam. Make sure to arrive 15 to 30 minutes prior to your scheduled scan to complete any necessary paperwork.

What to expect

Upon arrival for your scan, a small IV will be inserted into your arm to administer a low dose of radioactive material. The first set of images will be with your body at rest. You will then be asked to walk or jog on a treadmill for a period of time before being taken back to the imaging room for stress images. If you are unable to complete a physical exercise stress test, a medicine will be given to simulate exercise. This procedure will take up to 3 hours.

Report

After the exam, you may resume normal activities, including diet and medications. Your exam will be reviewed by a physician and a report will be sent to your health care provider, who will go over your results with you and discuss the next steps in your care.