



Cardiac SPECT Imaging

A Patient's Guide to Cardiac SPECT Imaging

What to expect and how to prepare for your exam

What is a cardiac SPECT exam?

Cardiac SPECT (short for single-photon emission computed tomography) is a way for doctors to examine if there are any blockages in the arteries that feed your heart muscle. The SPECT scan produces images that reveal problems like clogged arteries, damaged heart muscle (such as after a heart attack), and other conditions that can interfere with your heart's ability to pump blood through your body.

How do I prepare for the cardiac SPECT exam?

- Bring a list of all the medications and supplements you take.
- Leave any metallic jewelry at home.
- Let the technician know if you're pregnant or breast-feeding.

How does the cardiac SPECT exam work?

Before you have the exam, you will receive an injection of a "tracer" that contains a very small amount of radioactive material.

Depending on the type of test, you may be asked to exercise on a treadmill, or you will receive an injection of an agent that will simulate conditions of stress in your heart.

During the exam, you will lie on a table while a "gamma camera" rotates around you, taking pictures from many different angles.

Depending on the area being evaluated, people may be asked to restrict what they eat or drink before the test. The test usually takes 30 to 90 minutes.

How are the results determined?

Each picture the gamma camera takes during SPECT represents a slice of your body. A computer is used to combine these pictures into 2- and 3-dimensional images of your heart and vessels. Doctors look at these images to identify any problems with your heart.



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Additional Resources

Merck Manuals – Radionuclide Scanning – SPECT

NHLBI, NIH – Nuclear Heart Scan