

Radiology Associates of Ithaca

"YOUR NEIGHBORHOOD RADIOLOGISTS PRACTICING WORLD CLASS IMAGING"
101 Dates Drive, Ithaca, New York 14850

Nuclear Imaging: Nuclear Medicine, Bone Scan, Cardiac Stress Test

What is the test? There are many nuclear imaging procedures used to identify abnormalities in every major organ system within the body. The major difference between nuclear medicine and many other radiological imaging techniques is that nuclear imaging provides information on how the organ functions while it is at work.

How do I prepare? Your preparation depends on the specific nuclear study you are having performed. Most nuclear imaging procedures require no specific preparation, while others do. When you schedule your appointment, you will receive a brochure that tells you what to do prior to your particular test. Please plan to arrive at the Imaging Services Department 15 minutes before your scheduled appointment. Be sure to alert the radiologist if you have any medicine or food allergies. Please be sure to notify the Imaging Services Department if you are pregnant or nursing.

What can I expect during the procedure? Nuclear medicine uses radioactive materials to capture images of the body system or organ being studied. These materials are designed to be uniquely attracted to specific tissues, organs, or bones in the body. At the beginning of your nuclear study, a small amount of radiopharmaceutical will be introduced into your body. In most cases, this will be via intravenous injection. Imaging will be performed immediately, or within six hours of injection. (In special studies, additional imaging may be performed for up to the next three days.) As the radiopharmaceutical travels through your system, a special camera (called a Gamma camera) detects the material and creates an image of the organ or system in motion, while it is functioning. Nuclear imaging is safe and involves little or no discomfort for most people. The amount of radiation in a nuclear imaging procedure is comparable to that of a regular x-ray.

After the test? After your exam, you may resume your normal activities as directed by your physician, unless the radiologist gives you specific instructions to follow at home.

Information on Specific Nuclear Medicine tests

Gastric empty

Nothing to eat or drink after midnight before the test

When you arrive you will have 5 minutes to ingest an oatmeal mixture.

Scan time is about 2 hours.

Please bring with you a list of medications you are taking.

GI Bleed

No special prep for this test, but prior to imaging study ask your doctor about gastric indigestion meds you may be taking.

Upon arrival, you will be administered an intravenous injection of a radioactive material.

Scan time is 1.5 to 2.5 hours.

HIDA Scan

Nothing to eat or drink for at least 3 hours before the test.

Upon arrival, you will be administered an intravenous injection of a radioactive material.

Scan time is about 2 hours but may vary (1 to 4 hours).

Lung Scan

You must have a chest x-ray taken within 24 hours before your scan.

The first part of the scan consists of breathing a radioactive gas.

The second part consists of a radioactive injection.

Scan time is 30 to 45 minutes.

MUGA Scan

Upon arrival, you will be administered an intravenous injection of pyrophosphate.

After a 20-minute wait, you will receive an injection of radioactive tracer.

Scan time is about 90 minutes.

Renal Scan

Upon arrival, you will be administered an intravenous injection of a radioactive material.

Scan time is 45 to 60 minutes.

Please bring with you a list of medications you are taking.

Renal Scan with Lasix

If you are taking lasix, please ask your doctor if you should discontinue the medication.

Upon arrival, you will be administered an intravenous injection of a radioactive material.

Scan time is about 90 minutes.

Thyroid Scan

Please ask your doctor if you should continue or discontinue any thyroid medications before the scan.

Upon arrival, you will be administered an intravenous injection of a radioactive material.

Scan time is about 40 minutes. Please bring with you a list of medications you are taking.

Thyroid Uptake Scan

Nothing to eat or drink after midnight before the test.

Please bring with you a list of medications you are taking.

You will be given a capsule to ingest. You should return in 6 hours.

When you return, you will have a 3-minute uptake test.

24 hours later, you will return for part two of the uptake test.

No thyroid medications should be taken before your test. Please call Nuclear Medicine in Imaging Services at 274-4270 to learn when you should discontinue your medications.

Nuclear Cardiac Testing

Cardiac Rest Test

Nothing to eat or drink for 4 hours before the test.

You will receive an injection and then wait for 30 minutes.

Scan time is 20 to 30 minutes.

Cardiac Stress Test

No caffeine 24 hours prior to the test.

Nothing to eat or drink after midnight before the test.

Bring with you a list of medications you are taking.

Ask your doctor what medicines you may and may not take.

Wear comfortable clothing.

You will exercise on a treadmill and receive an injection through an IV.

If you are unable to exercise, pharmacologic stress will be performed.

Scans will be taken after the stress test.

Total testing time is 2 to 3 hours.

Bone Scan

What is the test? This test examines the activity of cells within your bones and skeletal system.

How do I prepare? Depending on the area to be scanned, you may be asked to observe specific dietary restrictions. Please consult with your physician. If you have any medicine or food allergies, please be sure to let the radiologist know ahead of time. It's best to leave jewelry at home.

What can I expect during the procedure? You will make two appointments for the same day: the first is for an injection, and the second is for the scan itself. One to two hours before the actual bone scan is performed, a tiny amount of radioactive material will be introduced into your body by means of an intravenous injection. You will be asked to drink 16 ounces of water to help move the fluid through your system. You may empty your bladder as often as you like and you may eat and drink. When an appropriate amount of time has passed (one-and-a-half to two hours) you will lie very still on a special table while the scanner slowly passes over your body. The scan takes 30-45 minutes and is painless. You may be asked to change position on the table, enabling the technologist to take additional images.

After the test? You should experience no after effects or discomfort from the bone scan. Return to your normal activities and diet.

Nuclear Cardiac Stress Test

What is the test? A nuclear cardiac stress test shows if your heart muscle is receiving adequate blood supply under stress and during rest. It is used to evaluate coronary disease.

How do I prepare? Once you have been referred by your physician, you may pre-register by phone one or two days prior to your test by calling the medical center at 274-4353. Avoid caffeine for 24 hours before your test, and don't eat or drink anything after midnight the night before. Please bring all of your medications, in their prescription bottles, to the medical center on the morning of the test. Wear walking shoes and a comfortable two-piece outfit, and plan to be at the medical center for three to four hours. Because there are waiting periods, you may want to bring something to read. Be sure to let the technologist know if you are diabetic, have chronic lung disease, suffer from knee or hip problems, or have had a stroke. Also alert the technologist to any drug or food allergies you have.

What can I expect during the procedure? Cardiac nuclear medicine uses radioactive materials to capture images of the heart functioning. To get the heart muscle working hard, you may be asked to exercise on a treadmill for several minutes. When you cannot exercise any more, a tiny amount of tracer will be introduced into your body through an intravenous (IV) line in your arm. You will then be asked to lie very still for up to 30 minutes. As the tracer travels through your heart, a special camera (called a Gamma camera) detects the material and captures images of the blood flow in your heart muscle.

Physical exercise is the preferred method of evaluating cardiac performance, but not all patients are able to perform the amount of exercise to achieve a valid study. If you are unable to exercise you will be given a pharmacological stress test.

After the test? Most people can resume their normal activities after the test is completed. Talk with your doctor about when to take any medication you were asked to skip before the test.

How and when will I get my test results? Typically, within 48 hours a written report of your test results will be sent to your referring physician, who will review them with you. Additional time (3 to 5 days) may be required if we are comparing these test results to previous findings from another hospital or health-care provider.

Where is this test performed? Nuclear Medicine Imaging studies are performed only at Cayuga Medical Center at 101 Dates Drive, off NYS Route 96 in Ithaca.