An I123 MIBG nuclear medicine scan is used to check for some kinds of neuroendocrine tumors (tumors that form in response to a signal from the nervous system), including pheochromocytomas (tumors that form in the center of the adrenal gland, located above the kidney).

Read this handout to learn how to prepare for the scan, how it works, how it is done, what you may feel during the scan, and how to get your results.

What is an I123 MIBG scan?

An I123 MIBG nuclear medicine scan is used to check for some kinds of neuroendocrine tumors, including pheochromocytomas. The scan is done over 2 days.

How does the scan work?

You will receive a small dose of radioactive material through an intravenous (IV) line. This material, called a tracer or radiotracer, collects in the neuroendocrine tumors and gives off gamma rays. A gamma camera detects the rays and then takes pictures of the areas where the tracer is.

How should I prepare for the scan?

- Your doctor may ask you to stop taking certain medicines or may switch you to different medicines before your scan. Some of these medicines are blood pressure medicines, anti-depressants, anti-psychotics, diet pills, and most over-the-counter nasal sprays. Check with your doctor before stopping or changing any of your medicines.
- You will receive a handout that explains how to prepare for your scan. It will tell you your test dates and what medicines you need to stop taking before the scan.
- If you have them, bring your most recent CT, ultrasound, or MRI scans of your abdomen that you had done at another clinic. They can be on films or CD-ROM. Our doctors will compare them to your new scan.
• Tell your doctor if there is any chance you are pregnant. If there is, you must have a pregnancy test done before you receive the injection of the radiotracer.

• Tell the technologist if you are breastfeeding.

**Day 1 of the Scan**

• You may eat and drink before receiving the radiotracer.

• On the 1st day of your scan, you will come to the Nuclear Medicine department. You will be asked to drink a small cup of water with potassium iodine added. This may have a slight metallic taste.

• An hour after drinking the potassium iodine water, the technologist will inject a small amount of radioactive tracer through an IV line. You will be monitored for 30 minutes after this injection.

**Day 2 of the Scan**

• You may eat and drink before your scan. Food and fluid in your stomach will not affect the quality of the images. You may also do your other normal activities.

• You will return to the Nuclear Medicine department for imaging.

• The technologists will help make you comfortable. The imaging may take 90 to 120 minutes. You must hold still when the camera is taking pictures. If you move, the pictures will be blurry and may have to be taken again.

• A gamma camera will be used to detect the gamma rays the radiotracer gives off. A computer will then produce pictures of areas where the tracer is.

**What should I expect during and after the exam?**

• You may have some minor discomfort during a nuclear medicine procedure from the IV.

• Lying still on the exam table may be hard for some people.

• Most of the radiotracer leaves your body in your urine or stool. The rest simply goes away over time.

• Ask your doctor if you need to restart any medicines that you stopped taking for this scan.

**Who interprets the results and how do I get them?**

When the scan is over, a doctor with special training in nuclear medicine will review your images, prepare a report, and talk with your doctor about the results. Your doctor will then talk with you about the results and your treatment options.