I123 MIBG Cardiac Scan

About your procedure

This handout explains what to expect when having an I123 MIBG cardiac scan at University of Washington Medical Center.

What is an I123 MIBG cardiac scan?

Your doctor has referred you for an I123 MIBG cardiac nuclear medicine scan. This scan will provide information about the function of the nerves in your heart (myocardial sympathetic innervation).

How does it work?

You will receive a small dose of radioactive material called I123 MIBG through an intravenous (IV) line. This material, also called a tracer or radiotracer, collects in certain nerve endings in your heart and gives off gamma rays. The gamma camera detects these rays and then takes pictures of the areas where the tracer is.

How do I prepare?

- 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 tells how to prepare for your scan, your test dates, and what medicines you need to stop taking before the scan.

- If you cannot lie still for 1 hour, you may need sedation for the scan. Talk with your doctor if you have concerns about lying still for that long.

- If you have them, bring your most recent CT, ultrasound, or MRI scans of your chest that you had done at another clinic. They can be on films or CD-ROM. Our doctors will compare them to your new scan.

Special Instructions for Women

- Tell your doctor if there is any chance you are pregnant. If there is, you must have a pregnancy test before you receive the radiotracer injection.

- Tell the technologist if you are breastfeeding.
Day of the Scan

- You must fast for 6 hours before receiving the radiotracer. You will be asked to continue fasting until the scan is done. It is OK to drink water during this time.

- When you arrive in 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 you drink the potassium iodine water, the technologist will inject a small amount of radioactive tracer through an IV line.

- After you receive this injection of tracer:
  - You will stay in the Nuclear Medicine department for 30 minutes. We will monitor you during this time.
  - You will then have a break of 3½ hours. You may leave the area during this time, but do not do any strenuous activities or exercise.

- Imaging will start 4 hours after you receive the injection of the radiotracer. At this time, you will be asked to lie on an exam table. The technologists will help make you comfortable.

- Both still images and 3-D images will be taken. These 3-D images are called SPECT (single photon emission tomography). During the SPECT scan, the camera rotates around your body. A low-dose CT scan may be done at the same time as the SPECT scan.

- 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.

- The imaging session may take 60 minutes.

What can I expect?

- You may have some minor discomfort from the IV.

- Some people find it hard to lie still on the exam table.

After the Scan

- Drink plenty of water to help your body get rid of the tracer. Most of it will leave your body in your urine or stool. The rest will go away over time.

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

Your Results

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