Thyroid Cancer Survey Using I123

Information, instructions, and precautions

This handout gives instructions for patients who will receive radioactive iodine to help look for thyroid cancer.

What is radioactive iodine (I123)?

Radioactive iodine I123 is a substance that is used to see where any thyroid tumors are in your body. Both thyroid cancer and thyroid tissue trap iodine. This helps us find where there is active thyroid cancer. This procedure is called a diagnostic thyroid cancer survey.

If thyroid cancer is found during your survey, you may have it treated with a dose of a radioactive iodine called I131. This is called a therapeutic dose.

How does radioactive iodine work?

We will ask you to swallow a small diagnostic dose of I123. Your intestines will absorb it quickly, and it will enter your bloodstream. Then it will go to your thyroid and to any thyroid cancer sites. Most of what your thyroid tissue does not absorb will leave your body in your urine and stool.

The I123 iodine gives off gamma rays (like X-rays), which can be seen with special Nuclear Medicine cameras. This allows us to see residual thyroid tissue (small amounts that are left after thyroid removal surgery) and any other places where there is still thyroid cancer.

What will happen during the survey?

- You will swallow a small capsule that contains a diagnostic dose (5 millicuries) of I123.
- The next day, we will use the Nuclear Medicine cameras to take pictures of your head, neck, and body to look for thyroid tissue and sites of thyroid cancer. You will lie on your back on a table for about 1 to 2 hours while the cameras scan your body.
What are the side effects of the survey?
Side effects from I123 are very rare. But there is a slight chance you might have some nausea the day you swallow the capsule.

How to Prepare for Your Survey

Diet
You must be on a **low-iodine diet** for 1 week before your diagnostic thyroid cancer survey. For low-iodine diet instructions, please visit this website: [www.thyca.org/rai.htm#diet](http://www.thyca.org/rai.htm#diet). If you do not use the Internet, please ask for a printed copy of these instructions.

Medicines
- **If you are a “withdrawal” patient**, you will need to stop taking:
  - Synthroid (Levothyroxine). Stop taking this for at least 6 weeks before your survey.
  - Cytomel (Liothyronine). Stop taking this for 3 weeks before your survey.
- **If you are a “Thyrogen rTSH” patient**, you do not need to stop taking any of your thyroid medicines. You will receive Thyrogen rTSH injections on 2 different days before you take the I123 capsule.

On the Day You Take Your Dose of I123
- **Do not** eat any solid foods or drink anything but water for 2 hours before and after your appointment. We encourage you to drink water.
- You will have a blood draw for lab tests just before you receive your diagnostic dose. These tests will check your blood counts and thyroid hormone levels.

For Women
- You **must** tell us if you are pregnant.
- If you will receive I131 therapy after your thyroid cancer survey, **you must have a blood pregnancy test before you take the radioactive iodine**. This test will be done the day you take your I123 dose. It may be done again on the day of your I131 therapy.
- **Please tell us if you are breastfeeding.** Women who are breastfeeding may **not** receive radioactive iodine, since it may be passed to your child in your breast milk. Women who will have I131 therapy after their thyroid cancer survey usually must stop breastfeeding for 3 months before they take the I131 dose.
After Taking Your Dose of I\textsubscript{123}

- **Do not** eat any solid foods or drink anything but water for 2 hours after you swallow the iodine capsule. An empty stomach will ensure that your body absorbs enough of the radioactive iodine.

- Starting 2 hours after your dose, we encourage you to continue to drink plenty of water. Juice is OK too.

- Remember, you will need to return to Nuclear Medicine for a scan the day after you take your diagnostic dose of I\textsubscript{123}.

- **Stay on your low-iodine diet while you are having your diagnostic scans and any iodine therapy.**

The Night Before Your Scan

- **Use an over-the-counter laxative** (one you can buy without a prescription) the night before your scan. Be sure to use one that does **not** contain iodine. Some iodine-free laxatives are Miralax, Bisacodyl, Milk of Magnesia, Magnesium Citrate, and Dulcolax suppositories.

- Taking a laxative to empty your bowel removes any extra I\textsubscript{123} that has collected in your stool. Stool that contains I\textsubscript{123} could give a **false positive** (incorrect) reading during your scan.

After Your Scan

- **If you are NOT having I\textsubscript{131} therapy**, you can resume your normal diet after your final scan.

- **If you ARE having I\textsubscript{131} therapy**, you must wait to resume your normal diet for 3 days after you swallow the I\textsubscript{131} capsule.

Radiation Safety Precautions

- There are no special precautions required after you swallow the I\textsubscript{123} dose.

Who reads the thyroid cancer survey scan and when will I get the results?

- A Nuclear Medicine doctor will read your thyroid cancer survey scan. This doctor also will review any other scan results that you bring with you.

- If you are scheduled for I\textsubscript{131} therapy after your thyroid cancer survey, the Nuclear Medicine doctor may also talk with you about some of the findings of your survey.

- If you are not scheduled for I\textsubscript{131} therapy right away, the doctor who referred you for this test will give you your thyroid cancer survey results within about 3 days.
To Learn More

To learn more about a thyroid cancer survey using I123 radioactive iodine, visit the Thyroid Cancer Association website at www.thyca.org.

Who to Call

University of Washington Medical Center (UWMC) Patients

UWMC Imaging Services ...................................................... 206-598-6200
UWMC Nuclear Medicine ..................................................... 206-598-4240

After hours and on weekends and holidays, call 206-598-6190 and ask for the Nuclear Medicine Resident on call to be paged.

Seattle Cancer Care Alliance (SCCA) Patients

SCCA Endocrine Clinic........................................................... 206-288-1160

After hours and on weekends and holidays, call 206-598-6190 and ask for the Nuclear Medicine resident on call to be paged.

Questions?

Your questions are important. Call your doctor or health care provider if you have questions or concerns.

See “Who to Call” on this page for UWMC and SCCA phone numbers and how to get help when these departments are closed.