WHAT IS A THYROGEN 131-IODINE TOTAL BODY SCAN?

- How should I prepare for this test?
- What can I expect during the test?
- Answers to common questions.

A Thyrogen stimulated total body scan with 131-Iodine is a nuclear medicine procedure used in patients with a history of thyroid cancer. Usually, patients have had their thyroid gland removed and are undergoing a routine check up to make sure the cancer has not returned.

Thyrogen is like the body’s naturally produced hormone TSH (Thyroid stimulating hormone). It is used to stimulate any thyroid cells that may exist in the body so they can absorb iodine and be visualized on the 131-Iodine nuclear medicine scan. The benefit of Thyrogen is that patients do not have to discontinue their thyroid hormone replacement medication.

When thyrogen was unavailable patients had to discontinue their medication for 4-6 weeks which caused undue hardship and adverse side effects to the patient such as marked fatigue and irritability.

131-Iodine is a radioactive tracer that emits a gamma ray (similar to an x-ray) and can be imaged using a camera called a gamma camera. This is administered in a pill form.

The entire test is scheduled over a 5 day period. On the first two days of the procedure, you will be administered a dose of thyrogen via an intramuscular injection. There are some rare side effects to these injections including flushing, headache, short-lasting nausea, local pain and/or swelling at the injection site, and even a more rare side effect of rash or hives. On day 3 you will be administered the 131-Iodine pill. There are no side effects to this medication.

On day 5, you will return for the body scans which will last approximately 45 minutes. There are no sensations or painful experiences with this portion of the examination.

The common indications for a thyrogen scan may include:

1. Patients unwilling to discontinue thyroid medications for 4-6 weeks prior to the 131-Iodine total body scan.
2. The combination of the thyrogen and body scans are more sensitive and less likely to miss the detection of thyroid cancer cells than blood tests alone.

Why a Low Iodine Diet before the test?

Your doctor will likely tell you to avoid certain foods before your Thyrogen 131-Iodine body scans. Since iodine in any form is taken up by the thyroid cells, it is important to restrict foods and medications that contain iodine for 1-2 weeks before the test so that the cells will take up the radioactive 131-Iodine and show up on the body scans.

Such foods include:
1. Iodized salt and sea salt
2. Milk and dairy products
3. Seafood, including kelp, shellfish, and seaweed
4. Breads with iodinated doughs (salt)
5. Chocolate, molasses, soy, soy sauces, milks or tofu
6. Foods or medications containing red food dyes

What Can I Expect During the Test?

Check in at the facility at your scheduled time. Please have your insurance card(s) with you as well as the requisition form from your doctor. You will then meet with the technologist. He/she will explain the procedure and all the details that you will have to undergo during the week. You will be
administered your first injection of Thyrogen and will be asked to return the following day for the second injection. The third day will involve the administration of a small pill and the 5th day will be the body scan. The camera will take 5 pictures. Each picture will last about 7-10 minutes. After each picture is taken the bed will move your body along the table until all images have been completed. It is important to lie as still as possible during the scans. A written report will then be sent to your physician upon completion of the test. Your doctor will then explain the results to you.

A
swers to common questions

How long will the test last?
Four appointments are required. A very small injection is administered intramuscularly on Day 1 and 2, each appointment lasting 5-10 minutes. The pill will be given on Day 3 and will last 5 minutes. Day 5 body scans will last approximately 45 minutes. Some variations to protocol do occur and will be explained by the technologist.

How much radiation is involved?
The pill of injection of 131-Iodine results in a radiation exposure to your body. We will give you direct instructions with regard to radiation protection for the general public as well as reducing your body’s exposure to radiation. General instructions are as follows:

1. Drink plenty of fluids for 48 hours immediately after you have received the 131-Iodine pill.
2. Maximize your distance from other individuals, unless it is deemed essential. This means we recommend maintaining a 5 foot distance from others to avoid their unnecessary exposure to radiation. Imagine a 5 foot bubble around your body with all other individuals on the outside of this bubble.
3. Minimize duration of time spent close to others. Restrict any close contact to CHILDREN OR PREGNANT WOMEN in order to avoid their exposure to unnecessary radiation, unless completely necessary.
4. Flush the toilet 2-3 times after use.
5. No breast-feeding until radioisotope has been completely eliminated from your body.
6. Please call our office and speak to one of our technical specialists for additional information 239-263-8001.

Do I have to stop taking any medications?
No.

Will I be able to drive after the test? Yes.

Are there any adverse reactions to the 131-Iodine isotope used?
No. The isotopes contain NO DYE and the amount of iodine is so low, there are no allergic reactions.

Are there any contraindications?
If you are pregnant or there is a possibility you may be, or if you are breast-feeding, the test may be inappropriate for you at this time.

Will I be enclosed within the Scanning Machine?
The first image of your head and neck requires that you remain still under the camera for approximately 7-8 minutes.