

Patient Information Guide for Low Dose Iodine-131 Therapy with Thyrogen

Affix patient label here

For further information, please contact:

- Radiology and Nuclear Medicine
2nd Level Mount Elizabeth Novena Hospital
38 Irrawaddy Road Singapore 329563
Tel: 65-63884333 Fax: 65-69330526
- Nuclear Medicine and PET Centre
1st Level Mount Elizabeth Hospital
3 Mount Elizabeth
Singapore 228510
Tel: 65-67312928 Fax: 65-67342928

Appointment Date and Time:

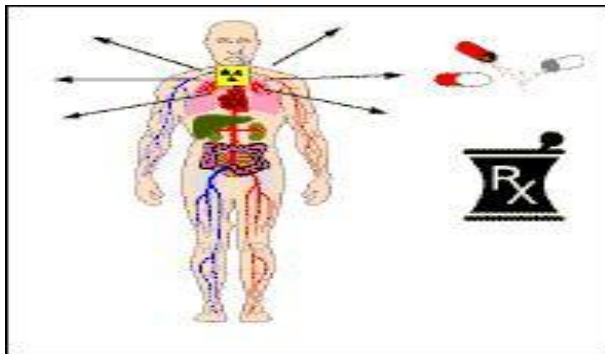
Thyrogen Administration: 1st Day: _____ Time: _____

2nd Day: _____ Time: _____

I-131 Oral Administration 3rd Day: _____ Time: _____

Whole body Scan: 5th Day: _____ Time: _____

Please be punctual on your appointment time



What is Radioactive Iodine Therapy?

Radioiodine treatment uses a form of iodine that is radioactive.

The procedure itself is a common and painless one, in which you are given radioiodine either in liquid or capsule form. The iodine-131 is a radioactive drug which is quickly taken up by your thyroid gland. Once there, the radiation emitted can be used to reduce the size of the thyroid.

What is Thyrogen?

Thyrogen is a form of recombinant human thyroid stimulating hormone (rhTSH), which is similar to the thyroid stimulating hormone that is naturally produced by our body. Therefore, you do not have to stop your thyroid hormone replacement (Thyroxine) or going through weeks of hypothyroidism when you are going for radioiodine scan or treatment. For administration of Thyrogen, you will receive two intramuscular injections over 2 days. Side-effects of Thyrogen are few and generally mild. Some people experience nausea, headache, weakness or vomiting after the Thyrogen injection. For further details on possible side effects, please consult your doctor or our department.

When will I require this treatment?

Radioiodine therapy is given in one of the following clinical situations:

- You have been operated on for thyroid cancer.
- You have been found with thyroid cancer metastatic lesion elsewhere in the body

The iodine-131 is a radioactive drug which is quickly taken up by your thyroid cells and acts to:

- Kill any thyroid cells that may have been left behind after thyroid removal.
- Treat thyroid cancer that has spread (called metastases)
- Treat recurring thyroid cancer

The body has the natural ability to eliminate the iodine once it has served its purpose.

How do I prepare for the treatment?

If your doctor recommends radioactive iodine therapy, high levels of TSH will be produced in your body by making you hypothyroid for a short time—either by not starting thyroid hormone pills after the thyroid gland is removed or by stopping your thyroid hormone pills if you are already on medication. Also, you may be asked to go on a low iodine diet before the treatment to increase the effectiveness of the radioactive iodine.

Some patients are unable to stop thyroid hormone replacement and are given an injection of a substance called "recombinant human thyroid stimulating hormone" (rhTSH) on the two days prior to radioiodine. The injection is given into muscle (usually buttock). Patients need to come to the hospital to have them administered.

1. You must not have had any iodinated contrast material (injection received during IVU, CT or angiogram).
2. Two weeks prior to the treatment, avoid the following:
 - A. Seafood – Crabs, Squids, Oysters, Cockles, Prawns, Fish & Seaweeds.
 - B. Drinks – Tea, Cola, Coffee, Lemonade and Whiskey.
 - C. Others – Canned, Processed Food.
3. Stop taking all cough mixtures, multivitamins (except for calcium/vitamin D) and traditional herbal medicine for 2 weeks.
4. On the day of the treatment, please fast for at least two hours BEFORE and one hour AFTER the treatment. You are allowed to have sips of plain water.

How is the treatment given?

The radioiodine will be pre-ordered in the dose as prescribed by the Nuclear Medicine Specialist. It is important that you come to the department at the appointed date and time.

The treatment is usually given as a small capsule or liquid. You will be given some water to help you swallow it. You should not touch the sides of the pot to avoid getting the radioactive liquid accidentally on your hands.

Are there any side effects from the treatment?

Occasionally, a patient will get a sore throat but this will last for only a few days. If it does happen to you, drink plenty of fluids. Sometimes patients develop inflammation of the salivary gland and a dry mouth. This can happen a few days or even months after the treatment. These side-effects are usually mild and transient.

Am I radioactive after treatment?

Yes, but only when the radioactive iodine remains in your body. Some radioactive iodine stays in your remaining thyroid tissue to get the desired treatment effect. The rest is eliminated in your urine, saliva, sweat and bowel movements. Drink plenty of water (2L per day). This will help to eliminate radioiodine from your body.

What precautions should I take after receiving the iodine capsule/solution?

1. For personal hygiene, do not share cutlery and flush toilet twice after use for 3 days.
2. Avoid close contact with others, especially children who are 5 years old or younger, as well as pregnant women, for a period of about 5 days.
3. For female patient, you should not attempt to get pregnant within the 6 months period after the treatment. Male patients should avoid impregnating their female partners within the 4 months period after treatment.
4. If you are breast feeding, you are required to stop breastfeeding until your next pregnancy.

The basic principles to remember:

1. **DISTANCE** – The greater the distance you are from others, the less radiation they will receive.
2. **TIME** – Radiation exposure to others depends on how long you remain close to them. You should try to minimize the time spent in close contact with others
3. **HYGIENE** – Good hygiene minimizes the possibility that other people will be contaminated with the radioiodine that leaves your body.

Why do I need to take precautions?

The radioactive Iodine that is not taken up by your thyroid is rapidly eliminated through body fluids such as urine, feces, saliva and perspiration. In order to prevent contamination, it will be necessary for you to observe a few rules to avoid exposing those people around you unnecessarily.

How much radiation dose will those around me receive?

By following the instructions and precautions given to you, upon discharge from hospital, you should be able to keep the dose received by other people to a level at, or below, the level they receive each year due to radiation present in the environment – e.g., from cosmic rays or radioactivity naturally occurring in rock formations. Thus, you present minimal to no health risk to others as a result of radiation exposure from you.

What are the risks and benefits of this treatment?

Benefits

- It has been shown to be an effective treatment for thyroid abnormalities.

Risks

- Radioiodine can occasionally cause slight neck and salivary gland discomfort and a temporary increase in thyroid activity which usually goes away within a few days to two weeks.

Can I change my appointment once made?

The radioiodine has to be custom ordered for each patient when the appointment is booked. It would be appreciated if any unavoidable cancellation or rearrangement can be made at least three weeks before your appointment date.

If you have any questions, please do not hesitate to ask.

I acknowledge that I have received and understood the information given to me.

Acknowledged by:

Signature of Patient/ Parent/ Guardian

Date

Witnessed by:

Name and Signature of Hospital Staff

Date