

RADIOACTIVE IODINE & THYROID CANCER



Thyroid cancer happens when the cells of the thyroid gland grow and divide in an abnormal way. Different forms of treatment are available for thyroid cancer. One successful treatment for this cancer is radioactive iodine.

What is radioactive iodine?

Normal iodine is a chemical the body needs for the **thyroid gland** to make hormones. Our bodies do **not** make iodine, it is something we get from the food we eat.

Radioactive iodine is a man-made chemical and it is used to take images (pictures) of the thyroid and also destroy thyroid cancer cells. Like normal iodine, radioactive iodine is swallowed, usually as a capsule (pill/tablet). After swallowing, the radioactive iodine is absorbed by normal thyroid cells and certain thyroid cancer cells. Radioactive iodine is a very good way to target thyroid cancer with radiotherapy from the inside.

There are usually two reasons why a doctor may offer this treatment to you:

1. To destroy thyroid cells that were left after thyroid surgery
2. To destroy certain thyroid cancer cells in the neck or other areas of the body.

What does radioactive iodine treatment involve?

This treatment will make you radioactive for a short time. This means you will emit or give off radiation energy during this time.

The treatment is given on the ward in the form of a capsule.

If you have problems swallowing capsules or tablets, you must let our nuclear medical staff know as soon as possible, this way they can organise and prepare your treatment as a drink.

For this treatment, we will:

- Admit you into hospital for around two to three days
- Keep you in a single room that has a lead shield to protect others from being exposed to radiation.

During this time, you will:

- Have your radiation levels check every day by staff until your levels have dropped
- Have limited visitors, especially in the first 24 hours
- Wear hospital clothing, especially in the first 24 hours
- Urinate (wee) sitting down and flush the toilet twice
- Receive your food and drinks in disposable (throw away) containers
- Have your left over food, drinks and linen collected by staff.

Your doctor and the Nuclear Medicine Technologist will go over the procedure one more time before you receive your treatment capsule. During this talk, it is a good idea to ask any questions you may have. Thinking about and listing your questions before having your treatment is a good way to make sure you have not forgotten anything important.

Are there any side-effects?

Patients sometimes experience some side effects. These side effects can include:

- Nausea
- Neck pain
- Dry mouth
- Difficulty swallowing.

It is important to let your nurse or doctor know immediately if you experience any of these side effects, discomfort or nausea.

What will you need to bring?

For your treatment stay at Peter Mac, you will need to bring:

- Day clothes and proper fitting shoes/slippers
- Night time pyjamas, slippers and dressing gown
- Toiletries, medications and prescription medications
- Medicare, health insurance, ambulance and pension information
- Books or other entertainment such as iPad or puzzle books.

What about visitors?

No visitors are allowed on the **first** day of treatment because of the high level of radiation in your body.

After 24 hours, we will limit visitors and they will only be allowed to stay for short periods.

Children and pregnant women are **not** allowed at any time during your treatment stay.

Will there be any follow up after treatment?

Yes, when you leave hospital, you will receive a:

- script for thyroid replacement tablets
- list of radiation safety instructions to follow at home
- follow-up appointment for a Nuclear Medicine scan within a week of discharge. This scan is used to compare to your pre-treatment scan and the results and report will be sent to your doctor.

What about precautions at home?

You will still be a little radioactive after discharge. As a result, you will need to take some precautions when you get home. You will receive a list of home instructions from our Nuclear Medicine staff that will help you manage:

- food preparation
- laundry
- coming into close contact with other people
- pregnancy
- sex and contraception.

Is preparation needed before treatment?

Yes, some preparation is required before having radiation iodine treatment. Your preparation will be discussed beforehand when you have a consultation with the Nuclear Medicine team.

Preparation for radiation iodine treatment:

One month before...	<p>You will need a high level of thyroid stimulating hormones (TSH) for this treatment to work.</p> <ul style="list-style-type: none">• To achieve a high TSH level, we will stop your thyroid tablets one month before treatment. Details about when to stop will be given to you at consultation as well as in your appointment letter.• In the event, thyroid tablets cannot be stopped we will discuss the option of having two injections to reach a high TSH level. Your doctor will discuss if this option is required for you.
Two weeks before...	<p>You will be asked to follow a low iodine diet for two weeks before treatment. A low iodine diet means AVOID eating foods such as</p> <ul style="list-style-type: none">• Seafood• Salt• Sushi. <p>You will receive a list of foods to avoid during this time.</p>
On treatment day...	<p>You will be asked to:</p> <ul style="list-style-type: none">• Fast (not eat or drink) for two hours before having the radiation iodine capsule. You will be allowed to drink plain water during this time.• Females who are able to fall pregnant will need to have a pregnancy test on the day of treatment. This will be done by our Nuclear Medicine staff before radiation iodine is given.



How to contact us

If you have any concerns or questions about radioactive iodine treatment, please talk to your GP or the Peter Mac Nuclear Medicine Team.

You can contact the Peter Mac Nuclear Medical Team on (03) 8559 6667.

In the event of an emergency, please dial **000** for an ambulance or go to your nearest hospital emergency department.