**NUCLEAR MEDICINE**

**RADIOACTIVE IODINE THERAPY**

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(Patients Name)

Please Report to **Ward 14B, Level 2, Building 3, The Canberra Hospital**.

On…………………………………...the……………………………………at……………………

(Day of Week) (Date) (Time)

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**What is the reason for Radioactive Iodine Therapy (RAI)?**

If the thyroid gland has been surgically removed (thyroidectomy) there is generally some residual thyroid tissue left behind that the surgeon cannot safely remove; radioactive iodine therapy can be useful in eliminating this residual thyroid tissue more safely. Iodine in the body is naturally absorbed by any thyroid tissue; so by giving a tablet/capsule of $^{131}$Iodine (a radioactive form of iodine) any residual thyroid tissue left over after surgery should absorb the $^{131}$Iodine and be eliminated. This process is painless and has minimal effects on other parts of the body. The procedure involves simply swallowing one or more capsules which are similar to other capsule or tablet medicines. Please inform Nuclear Medicine if you have trouble swallowing capsules or tablets.

**What will the treatment involve?**

Once you arrive at ward 14B you will need to be formally admitted as a hospital inpatient and shown to your single hospital room. This process may take some time as there could be delays in preparing the room as well as waiting for a doctor to be available to perform your admission.

After the room is ready and you have been admitted as an inpatient the staff from Nuclear Medicine will come to the room for your treatment (give you the capsules which you may swallow with a cup of water). Before doing so we will explain the treatment and give you a chance to ask questions before signing a consent form. You must have been fasting for 6 hours and you will need to continue fasting for a further 2 hours after the treatment. You will be left in the single room for the weekend with meals being left outside the door for you to collect. The room has a television, chairs, fridge, bed, locker and a phone for calling the nurse's station. You will have your own bathroom with your own toilet.

Medical Physics staff will monitor your radiation levels immediately after the treatment and again before you are discharged. Discharge will most likely occur on Monday but this cannot be guaranteed. You will be booked in for a scan on the following Friday.
What preparation is required?

**Fasting** - You will be required to fast from 6:00am on the morning of your treatment and for 2 hours following the treatment. You may have a light breakfast before 6:00am and nothing else after that. Small sips of water are permitted. If you are diabetic you may take half your normal morning insulin / tablet.

**Medications** - Consult with your doctor about which medications to continue and stop. If you will continue to take any medications you should bring a supply with you and show these medications to the admitting doctor when you are being admitted to the ward. It is important that you inform your referring doctor if you are taking any vitamin or mineral supplements as you may be required to stop taking these supplements.

**Pregnancy test** - You cannot have this treatment if you are pregnant. If you are a woman of childbearing age, you will be required to undergo a blood pregnancy test on the morning of the treatment or the day before. It is essential that you inform us in advance if you are breastfeeding as it is advised that breastfeeding be ceased at least 3 months before radioactive iodine therapy.

**Low-Iodine Diet** - A low iodine diet before your therapy may be recommended to improve the effectiveness of the treatment. Please discuss this with your referring doctor. Some low iodine recipes can be found at www.thyca.org

What are the risks of Radioactive Iodine Therapy?
The major risks and complications of this treatment may include swelling and tenderness of the neck or salivary glands as well as a dry mouth. You may also experience nausea and/or vomiting. Exposure to radiation may increase the risk of developing cancer.

Why must I stay in hospital?
After you swallow the radioactive iodine capsule/tablet your body and body fluids will be radioactive for some time meaning that others may be exposed. Patients are required to remain in hospital isolation until the radioactivity in your body has fallen to an acceptable level.

The Medical Physics department will monitor your radiation levels while you are in hospital. Once the amount of radioactivity remaining in your body has fallen to an acceptable level you will be discharged. This generally occurs by the following Monday but is not guaranteed.

What happens when I am in hospital isolation
The radioactive iodine will be taken up in the thyroid gland within the first 24 hours. Some of it will exit your body through fluids such as saliva, sweat and urine so we recommend that you wear a hospital gown during your stay to prevent the contamination of your personal clothing.

You will notice that the toilet will flush for a very long period of time, in order to remove all traces of contaminated urine.

Two bins will be provided, and labelled for your convenience. One bin will be labelled radioactive and this is where you put all rubbish such as plastic cutlery, cups, food scraps and tissues. Everything that has come in contact with your bodily fluids (including sweat from your hands) could have traces of radiation on it. The second bin will be non-radioactive and is for items that have not come in contact with your bodily fluids.

If you have any questions during your stay, please don’t hesitate to ask the nurse looking after you. There will be a phone in the room that can be used to call the nurse’s station. If you wish to make external calls with this phone, you will need to buy a phone card from a newsagency prior to your arrival. These phone cards are the same as the ones that are used with payphones.
What can I bring with me?
You may bring your own snacks (You should bring chewing gum or lollies to help prevent the side effect of dry mouth). You may also bring personal items including your mobile phone and laptop computer but all of your items will be monitored for radiation when you leave. If any radiation is detected those items will be stored at the hospital for a period of months. If you have any questions regarding what you should or should not bring, please call us in Nuclear Medicine.

Can I have visitors?
Having visitors is not advised, however if necessary they may stay for a maximum of 10 minutes. They must maintain a safe distance from you and be seated near the door. Pregnant women and children are NOT permitted to visit in any circumstance.

What about my meals?
During the admission process you will have the opportunity to choose your meals for the weekend. All of your meals will be delivered to your room and placed inside the door on a table. Your meals will be served with disposable plates, cups and cutlery. It is important you use these disposable items and discard them in the radioactive bin as your saliva will be slightly radioactive for the first few days after treatment. Once you have finished your meal, you may leave your tray on the same table that it was delivered to. Remember, you may bring as many snacks with you as you like.

What happens when I go Home?
When you leave hospital time your body will still contain a small amount of radioactivity and because of this you should follow some precautions (listed below). You will be given an instruction sheet upon discharge with more specific information.

Your doctor may request a whole body scan following your treatment. Your appointment for this scan is generally the next Friday after your treatment in the afternoon.

You may need to stop or start taking medication at specific times; please consult with your doctor to make sure you have a medication plan.

Precautions to follow after discharge generally include the following:
- Keep a distance of 2 metres between yourself and any children or pregnant women.
- Do not participate in any intimate activities.
- Sleep in a separate bed away from others, and do not share linen.
- Wash your clothes and bed linen separate from other people’s washing.
- Do not share cutlery/crockery and wash it separately to others’.
- Do not share your toothbrush.
- Do not travel in a car or public transport with other people for more than two hours per day.
- Flush the toilet twice and sit down while urinating.

It is also important that:
- Women should not become pregnant for 6-12 months after therapy.
- Men should not father children for at least 3-6 months after therapy.
- The above two points should be discussed with your referring doctor especially if you intend on having children.
Please feel free to call us on 6244 4345 if you have any questions or to reschedule