

# Radioactive Iodine Treatment

Radioactive iodine (RAI) is often chosen for treatment of an overactive thyroid because of its simplicity and effectiveness. RAI treatment is based on the fact that the thyroid actively accumulates iodine, which it uses to produce thyroid hormones. For use in treatment, the RAI is given as a capsule. It is absorbed quickly by the stomach and intestines, and then is carried to the thyroid, where it is taken up by the gland. While in the thyroid gland, the RAI disrupts the function of some of the thyroid cells. As some of the cells stop functioning, excessive amounts of thyroid hormones are no longer produced and symptoms of hyperthyroidism begin to disappear.

## Precautions

Some precautions are necessary because of the small amount of radiation that emanates from the neck where the RAI is stored for a few days after treatment.

While this radiation is beneficial for the person being treated, precautions are recommended to reduce the radiation families and friends are exposed to.

- » Avoid prolonged close contact with others, especially children and pregnant women.

In general, a distance of one arm's length should be maintained between the person treated and others who spend more than two hours next to the patient in any 24 hour period.

While brief contact with a person after treatment is acceptable, sleeping together, watching television, going to movies, long car or plane trips should be avoided for up to 7 days after the treatment.

Sharing food and utensils, including glasses, bottles, cans of soda, water, beer, etc. must also be avoided. Dishes and eating utensils should be rinsed before being put with those of the rest of the family. Paper plates and plastic utensils should only be used if they are immediately disposed of outside the home. Cooking is fine, as long as the utensil used to taste the food while cooking is not re-used before rinsing.

- » For the first 12 hours, drink lots of liquids, pass urine often, and flush twice.

The treated person should drink lots of liquids especially water, to help remove

the RAI from the system. Flush the toilet twice after using it, and be sure to thoroughly clean up any spilled urine.

Laundry need not be washed separately unless the treated person has sweated heavily, such as after exercise.

- » No pregnancy or breast-feeding.

It is extremely important that women who are breastfeeding stop before the RAI is given. Iodine is concentrated and excreted in breast milk.

Pregnant women should not be treated with RAI, and pregnancy should be avoided for three months following treatment.

## Possible Side Effects

Radioactive iodine treatment has a few side effects, and these occur infrequently:

- » A sore throat may occur a few days after the treatment, which can be treated with Panadol.
- » Rarely, the salivary glands may swell, which is caused by the iodine and not the radioactivity. Sucking hard lollies for a few days may prevent this.
- » Mild nausea may develop for a few hours after the iodine is taken, so it is best not to eat for 4 hours before and 1 hour after the iodine administration.

## After the Treatment

Symptoms of the disease will improve slowly, beginning about two weeks after the treatment. Muscle strength improves, tremors and irritability lessen, heat intolerance improves, and sleep is sounder.

To prevent recurrence of the disease, enough radioiodine is commonly given to cause an under active thyroid within six to twelve weeks following treatment.

Once the thyroid becomes under active a single daily pill of thyroid hormone must be taken for life.

Although most patients are completely cured, a few people may need a second treatment.

Even if thyroid function returns to normal after radioactive iodine, there is a high likelihood that the thyroid will eventually become under active.



## Appointment

Please phone or SMS our friendly booking service on **1300 788 508** or request an appointment online [www.canberraimaging.com.au](http://www.canberraimaging.com.au)

## What to bring

Please bring the following items with you to your appointment:  
→ Your referral  
→ Any relevant films  
→ Medicare card  
→ Pension / Health Care card

## Your results

Your doctor will receive fast and convenient electronic access to your reports and images. Canberra Imaging Group strongly advise that you return to your referring doctor in order for your doctor to discuss your results with you.