Please arrive 15 minutes early to allow for parking and registration.

If you have questions or need to cancel your appointment call:
905-521-6095
Nuclear Medicine Department
Level 0 – Marian Wing
St. Joseph’s Hospital
50 Charlton Avenue East
Hamilton, Ontario L8N 4A6

Low Dose Radioactive Iodine (I-131) Therapy for Thyroid Disease

This pamphlet provides general information. You can get more information on this treatment from:
• the doctor caring for your thyroid condition or
• the doctor in the Nuclear Medicine Department

What is radioactive iodine?

The radioactive form of iodine is also called radioiodine. It has been used for over 50 years to test thyroid function and treat some thyroid problems.

This type of treatment is used to treat:
• hyperthyroidism in people with Grave’s Disease – an autoimmune form of hyperthyroidism
• non-cancerous or benign thyroid nodules that produce too much thyroid hormone called hyperfunctioning nodules
Am I radioactive after treatment?

Yes. Some radioactive iodine stays in your thyroid to get the desired treatment effect. The rest is eliminated in your urine, saliva, sweat and bowel movements. Most of the radioactive iodine that your thyroid does not use comes out the first 2 days after treatment.

You need to follow precautions for 7 days to make sure you reduce the amount of radiation you expose others to.

How are other people exposed?

The radiation given off by radioactive iodine in your body is similar to x-rays. People who stay close to you for long periods of time may be exposed to unnecessary radiation as well. They may also come in contact with small quantities of radioactive iodine eliminated by your body through urine, saliva or sweat.

This is why you must follow special precautions for 7 days.

You must sign a SJHH "Consent to Treatment" form on the day of your treatment. By signing this form, you are indicating that you agree to follow the special precautions in order to minimize radiation exposure to yourself and members of the public.

Do I pay for this treatment?

No.

Who do I contact if I have questions or concerns?

Please feel free to ask questions at any time. You should direct all medical questions to your doctor who ordered this treatment.

Although there is nothing about this treatment that causes nausea, if you should feel sick and cannot get to the toilet, use a basin or trash can. Clean these items with a regular household cleanser and rinse well.

Notes:

__________________________________________________________________________________ ____________________________________________ ____________________________________
Food and dishes
- Use separate dishes and wash separately.
- Eat prepared food or prepare your own food separately from the people in your home.

Clothes, bedding and towels
- Wash separately.
- After 7 days of following these guidelines wash these 2 times before returning to general use in your home.

Close contact
- Avoid kissing and sexual intercourse.

What about pregnancy?
Radioactive iodine treatment is not given during pregnancy. You should wait 6 months after treatment before becoming pregnant or fathering a child.

There may be other reasons why you should avoid being pregnant so talk to your doctor about this.

What about breastfeeding and caring for a baby?
You cannot breastfeed since radioactive iodine is secreted in breast milk. Limit time spent in close contact with your baby for 7 days. After 7 days, you can care for your baby again.

How do I prepare for this treatment?
Before treatment, your doctor will ask you to stop taking your thyroid hormone tablets or anti-thyroid medication. Your doctor will tell you when to stop taking this medication. Your doctor may also ask you to follow a low iodine diet 3 weeks before treatment. This helps your body use the radioactive iodine better during treatment. The diet is explained to you by your doctor if you need to follow it.

Women must be certain that they are not pregnant at the time they get the treatment. You may need to have a pregnancy test.
Breastfeeding must be stopped completely since radioactive iodine is secreted in breast milk.

The day of treatment
On the day of treatment do not eat or drink anything for at least 2 hours before your appointment time. This is to make sure the capsule will be absorbed.

How is the treatment done?
After your arrive, you are taken to a treatment room. The doctor reviews the special precautions that you need to follow for 7 days. You then sign the SJHH “Consent to Treatment” form stating that you agree to follow the safety precautions. Feel free to ask questions before you sign.

The radioactive iodine is then brought to you in a lead container. You swallow the capsule(s) whole with a full glass of water. You then leave the hospital and follow the precautions.
How can I reduce radiation exposure to my other organs and other people?

Most of the extra radioactive iodine is eliminated in your urine. It is important to drink fluids after your treatment and for the next 2 days. This lowers the amount of radiation exposure to your bladder. You may also be advised to suck on sour candies after treatment to help the radioactive iodine come out in your saliva.

These guidelines depend on your personal health history. Before your treatment begins, talk to the doctor who ordered the test about:

- when to start and stop sucking sour candy if you are allowed to suck candy
- the amount of fluids you should drink

What precautions do I follow at home?

Following the rules listed below will help you reduce the risk of exposing others to radiation. These rules must be followed for 7 days once you get home.

Time

The less time you spend around other people the better. This is very important with children and pregnant women. Avoid being close to pregnant women and children for at least 7 days.

When you are around people, spend no more than:

- 45 minutes a day at 1 meter or 3.5 feet or
- 2 hours a day at 2 meters or 7 feet or
- 7 hours a day at 3 meters or 10 feet

You can spend as much time as you like at 4 meters or 13 feet from other people. You may need to take time off work, school or your normal activities to meet these guidelines.

Distance

The greater distance from other people the better. For example, doubling your distance from someone decreases exposure by a factor of $\frac{1}{4}$. Examples of increasing distance include:

- Sleep alone.
- Do not sit right beside someone on a couch or in a vehicle.
- Sit as far away as you can from the person driving you home from the hospital.
- Do not use public transit.
- Do not go to the theatre or any event where you would be close to people.

Hygiene

Good hygiene is very important to reduce exposure to others.

- If you can, use a separate washroom in the house. Clean this washroom well on the 8th day after treatment.
- If you do not have a separate washroom, clean the sink and toilet well after each use.
- Wash your hands with soap and plenty of water each time you use the toilet.
- You must have at least 1 shower a day. No baths.
- Keep the toilet and surrounding area very clean.
- Men should urinate sitting down to avoid splashing.
- Flush the toilet 3 times with the lid closed after each use.
- Rinse the bathroom sink and tub thoroughly after using.
- After brushing your teeth, spit into the toilet then flush the toilet 2 times.
- Do not chew gum.