

# Iodine-131 Therapy



Here is information about Iodine-131 Therapy. This will be helpful if you receive this treatment for your cancer. This handout will tell you about the special precautions that you and the hospital staff must use during your treatment. It will also give you some instructions to follow when you go home.

## What is iodine-131 therapy?

A form of iodine that is radioactive. It comes in a liquid or a capsule, and it is taken two times. The first dose is a low dose, called a **tracer** dose. This dose helps the doctor make decisions about your future treatment. You can go home after taking it. The second dose is a higher dose. It is your therapy dose. Depending on the dose of I-131 therapy and other factors, you may need to be admitted to the hospital, but many people can go home following precautions that will be reviewed with you in detail.

## Why do I need iodine-131 therapy?

When the doctor removed your thyroid gland, some thyroid tissue remains in your neck or some of the thyroid tissue may spread to other parts of your body. Like all radioactive substances, I-131 lets go of the radiation as it breaks down. The bowel soaks up the I-131, which flows through the bloodstream and collects in thyroid cells. Thyroid cancer cells left in the neck and those that have spread to other parts of the body can be seen and may be treated when they soak up the I-131.

## What is radioactive iodine?

Iodine-131 (I-131) is a radioactive liquid. It is let go in body fluids. Radiation can be measured around your body and is present in your skin oil and sweat, saliva, urine and tears. The I-131 leaves your body mostly through your urine.

## How much radiation is there?

As per Federal and State regulations, If the dose of I-131 is low enough, you will be treated as an outpatient. If the dose is high, you are hospitalized to protect others from radiation exposure. A Radiation Safety Specialist will come to your room 1 - 2 times a day to measure your radiation levels. These radiation levels will be less every day. Once your levels have lowered to a certain point, you will be allowed to go home. The radiation level at which you are allowed to go home is determined by State of Ohio regulations. Most radiation is gone in a few days. Within 3 weeks, only traces of radioactive iodine remain in the body.

### **Why do I need to follow a low iodine diet?**

When you are scheduled to receive I-131, you will be asked to follow a low iodine diet. You follow the low iodine diet because it is important to "starve" the cancer cells of iodine. This allows the radioactive Iodine to enter those cells. Your thyroid cancer cells can't tell the difference between iodine that is radioactive and iodine that is non-radioactive. You will need to stay on this diet for 2 weeks before getting either the tracer or therapy dose of I-131. Special diet instructions will be given to you to assist you to follow the low iodine diet.

### **What side effects are there in taking the iodine-131?**

Sometimes the iodine radiation can cause patients to have a dry mouth or lose their sense of taste or smell for a short time following therapy. Chewing sugar free gum or sucking on lemon drops may decrease the dry feeling in the mouth. You will need to wait for 24 hours following therapy to do this. Some patients also get an upset stomach. There are also special pills you can take before taking high doses of Iodine -131 that can soothe the stomach. Ask the doctor or nurse to give you medicine before taking the I-131 if you have a sensitive stomach. During treatments, patients are encouraged to drink lots of water and other fluids because fluids help I-131 pass out of the body more quickly.

### **Where will I stay when I have my iodine therapy?**

Most patients can safely go home immediately following the radioactive iodine treatment. You will be given special instructions to follow at home for about 3-5 days.

If you are in the hospital, you will be in a special room that is specially made for patients who are getting this kind of therapy. This room has shielding in the doors and reinforced walls. This is called radiation shielding. This shielding prevents the radiation from leaking into the halls or other rooms.

Your room will have paper on the floor. There will also be plastic covers on some of the furniture, doors, handles and switches. This is to protect others who will use the room after you. It also makes it easier to decontaminate the room after you go home. When you touch something in your room, please touch the covered parts only.

While you are in this special room, you will not be allowed visitors. You can call your family and friends on the telephone. Your nurses and doctors may come in your room to take care of you. The staff will spend as little time as possible in your room. This will help limit the staff's exposure to radiation.

### **What special care is needed in the hospital?**

- Your meals will be served with paper or plastic dishes, utensils and trays.
- Menu selections are made for you. However it is wise to remind staff that you must eat a low iodine diet. You may bring your own snacks for meals and have them stored in the hospital's refrigerator.
- Dispose of your dishes and tray in the special gray plastic trash container. If you do not eat all of your food; flush the soft foods down the toilet. If the food is too bulky to flush, please throw it in the gray plastic trash container.
- Put all your trash into the large gray trash can.
- Flush the toilet three (3) times after you use it.
- If you feel like you are going to get sick (vomit), try to go into the bathroom. Vomit into the toilet. Call your nurse right away. You will need to flush the toilet 2-3 times.
- Anything that is taken into a shielded room must stay in the room, even after you go home. This is to keep the radioactive material from going into public areas. You may be given special permission to take out some things such as: glasses, dentures, rings or contact lenses. Other things like books or magazines must stay in the room and be thrown away when you leave.

### **If I am in the hospital for the therapy, do I have to take special care when I go home?**

When you go home, you will still have some radioactive material in your body. Special care needs to be taken for three to five (3-5) days after going home from the hospital.

The Office of Radiation Safety will give you individualized instructions before you are discharged.

### **General visiting guidelines at home:**

- Limit visiting with children younger than 18 or pregnant individuals to **no more** than 15-20 minutes a day. Usually keep at least 3 feet away from them during this time.
- Generally do not have young children sit on your lap. They should usually stay at least 3 feet away from you. They may give you a brief hug a couple of times a day.
- Do not breastfeed until your doctor tells you that you may.

## **What about other medications?**

Make sure your doctor is aware of any medicines, supplements or remedies you are taking. You will usually be asked to stop taking your thyroid medication 4 to 6 weeks before taking I-131 therapy. Then to begin it again 2 days after you take the therapy dose.

Some patients need to take Iodine-131 again to treat their thyroid cancer. Your doctor may want you to take a medication called Lithium to help the Iodine-131 to work better. If so, you will be given information about Lithium. There is a special handout on "Lithium and I-131 Therapy" that gives this information.

## **Who should I call if I have questions?**

For questions related to your overall treatment or about managing effects of treatment, talk with your doctor and nurse.

If you have questions or concerns about radiation safety guidelines, please call the Radiation Safety Section at (614) 292-1284 or pager (614) 240-0705.

**If you would like more written information, please call the Library for Health Information at (614)293-3707. You can also make the request by e-mail: [health-info@osu.edu](mailto:health-info@osu.edu).**

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