



General Treatment Information

The thyroid gland accumulates the iodine entering your body in foods and uses this iodine to perform its normal functions, which is to make thyroid hormone. The thyroid processes radioiodine in a similar manner. The radiation given off by this form of iodine decreases the function of the thyroid cells and inhibits their ability to grow, which is the desired medical effect. However, some of the radioiodine will leave your body, and individuals who are in close physical contact with you may be exposed to small amounts. There is no evidence that such exposure has caused harm, but efforts should be made to avoid unnecessary exposure to radiation.

Why are you going to receive radioactive treatment?

You are going to receive radioactive iodine treatment because together with your doctor it has been decided that this is the best option for your disease. Most of the radiation emitted by the iodine will be absorbed by your thyroid gland or its remnants, which is located in the anterior part of the neck. This radiation interferes with the function of the residual thyroid cells producing a desired and beneficial effect for your disease. However, small quantities of the radiation present in your body may reach people close to you exposing them to this radiation unnecessarily.

How is radioactive iodine administered and what sort of preparation is required?

You would have received separate instructions from your doctor to stop taking thyroid medication for a minimum of two weeks before radioactive iodine treatment. Radioactive iodine is given orally in variable quantities according to the type of your disease. Your treating doctor together with the physician who will actually administer the treatment determined the dose. According to the administered dose and your condition, it is possible that you should remain isolated for some days. Women must be completely sure that they are not pregnant at the time they receive the treatment. Food should not be ingested in the 2 hours before receiving the treatment and in some cases, a low-iodine diet will be recommended for a few days. You should talk to your doctor to clarify all your doubts in order to organize the activities of you and your family.

For how long does iodine remain in my body?

Radioactive iodine remains in your body just for a few days. Mainly the urine eliminates most of the iodine not retained in your thyroid, within 48 hours. A small quantity will be present in the saliva, sweat and stools. The radioactive iodine that remains in your thyroid gland also decreases quickly. This means that the possibility of unnecessary radiation exposure to other people also decreases in a matter of days.

In which way other people may be exposed to my body's radiation?

Radiation emitted by the radioactive iodine in your body is very similar to the x-rays used in radiological exams. For this reason, people who remain close to you and for prolonged times may be exposed to an unnecessary and avoidable radiation.

Besides the above mentioned radiation, there is the possibility that other people close to you may directly ingest small quantities of radioactive iodine eliminated by your body in the urine, saliva or sweat through contamination.



In which way can I reduce the risk of radiation exposure to other people?

Even though the amount of radioactive iodine present in your body is small, and there is no evidence that the radiation emitted by it may cause problems, it is still advisable to decrease the opportunities to exposure as much as possible. The three basic principles to avoid unnecessary radiation exposure are listed below. You can reduce radiation exposure to others by using the following guidelines (usually two to five days after your treatment). However, your doctor can recommend modifications to these guidelines based on your specific situation. Be sure to discuss your questions and concerns with your doctor.

The three basic principles to remember to reduce radiation exposure to others are:

1. **Distance.** The greater the distance you are from others, the less radiation they will receive. Guidelines are: sleep alone for the first few days after your treatment and avoid kissing or sexual intercourse. Also avoid prolonged physical contact, particularly with children and pregnant women. If you have a baby, be sure to get instructions from your doctor. You can probably do all things necessary to care for your baby, except breastfeeding (see below), but it is preferable not to have the baby too close, such as sitting in your lap, for more than a short time during the first two days after treatment.
2. **Time.** Radiation exposure to others depends on how long you remain in close contact to them. You should minimize the time spent in close contact with others. Drink plenty of fluids, such as water or juices, to help you urinate more frequently. This will help the radioiodine to leave your body more quickly, thus lowering the amount in your body.
3. **Hygiene.** Meticulous hygiene lessens the possibility of contaminating others. Guidelines are wash your hands with soap and plenty of water each time you go to the toilet. Keep the toilet very clean. Also, flush the toilet two or three times after each use. Men are advised to urinate sitting down to avoid splashing urine outside the toilet bowl or in its borders. Rinse the bathroom sink and tub thoroughly after using them to reduce the chance of exposing others to the radioiodine in your saliva and sweat. Separate a towel for your exclusive use. Wash your underwear and bed linens separate from the rest and rinse it several times. Use separate (or disposable) eating utensils for the first few days and wash them separately to reduce the chance of contaminating other family members with radioiodine in your saliva. Do not prepare or handle food with your bare hands (such as making dough) to avoid contamination food with small amounts of hand perspiration.

Other guidelines to consider:

- If you are pregnant, or think you are, tell your doctor because radioiodine should not be given during pregnancy. If you are planning to become pregnant, ask your doctor how long you should wait after the treatment.
- If you have been breastfeeding your baby, you must stop because radioiodine is secreted in breast milk. Talk to your doctor to find out when you can resume breastfeeding.

PRACTICAL ADVICE:

Ask your doctor to give you all the necessary recommendations in detail to avoid unnecessary radiation to people who are close to you and other individuals. Clarify all your doubts and do not be afraid to ask.