

Radioactive iodine therapy in the ward

Purpose of the therapy

For the treatment of thyroid cancer, you will be given radioactive iodine. Iodine emits radiation that destroys any remaining thyroid cells in the surgical area. Due to the radiation, you will need to stay in a single room with your own toilet and shower for 1-3 days. Iodine allergy is not a contraindication for iodine treatment, but please inform the ward upon arrival.

Preparation before hospital admission

During the 2 weeks prior to iodine treatment, follow a low-iodine diet. The low-iodine diet will continue during the radioiodine treatment on the ward and end when you are discharged. At the end of this instruction, you will find guidelines for the low-iodine diet.

Thyroid medication will be discontinued according to the doctor's instructions. You will receive written instructions (the ordering unit will take care of it).

X-ray contrast agents (including various fluoroscopies) may interfere with the treatment for several months. Please inform the isotope ward as soon as possible before receiving the treatment capsule if you have had X-ray examinations using contrast agents.

Administration of the therapy

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The medication capsule will be brought to your room. Swallow the capsule whole with water. Refrain from eating for two hours before and two hours after taking the capsule, but you can drink a small amount of water.

The iodine capsule does not cause nausea. However, if you vomit within two hours of taking the capsule, inform the nurses immediately. In that case, it is possible that the therapeutic dose has been wasted. To reduce the radiation dose to the intestines, you will receive a laxative from the ward. Follow the instructions provided separately for taking the medication for one week if your bowel does not function daily without medication.

During your stay on the ward

You have been assigned your own room and should not leave it or receive visitors. The room is equipped with a TV, radio, and a private bathroom. You can bring books, magazines, or a smart device with a SIM card. However, do not bring any handicrafts (radioactive iodine can be Patient Instructions, Department of nuclear medicine and PET, 2024

excreted through sweat). Additionally, you can bring your own footwear for moving around in the room. Take a shower at least once a day and use plenty of water. Similarly, when using the toilet, flush it twice. It is good to drink plenty of fluids during the first day of treatment. Food, drinks, and coffee will be brought to your room on a tray.

On the day of your discharge, collect all the hospital textiles you have used in a laundry bag and dispose of all the waste in a garbage bag. However, do not put wet textiles in the laundry bag. All bags will be taken to a special half-life storage for a few weeks.

Discharge

You will be discharged when the radiation level falls below the limit set by the authorities. After leaving the hospital, you must carefully follow the following instructions. The goal is to minimize the radiation dose to others.

- Breastfeeding must be discontinued.
- Avoid getting pregnant for six months. It is advisable to discuss this with your treating physician.
- Pay special attention to personal hygiene during the week following the treatment.
- After using the toilet, flush it at least twice and wash your hands thoroughly.
- Taking a shower at least once a day is recommended, but avoid saunas.
- You should sleep alone in your own room for approximately 1-2 weeks.
- Avoid prolonged close contact with other individuals for 1-2 weeks, especially be cautious around children (including unborn children).
- If you plan to travel abroad within a couple of months after the treatment, you can request a certificate of radioisotope treatment from the isotope laboratory. There are radiation detectors at border crossings that can detect the radiation emitted by radioactive iodine for several weeks after the treatment.
- If you plan to travel to Russia during this period, please inform the staff of the isotope laboratory.

The medical physicist may provide you with individual instructions based on your specific circumstances. In that case, follow the given oral instructions.

Low-iodine diet

Why is a low-iodine diet recommended?

In radioiodine treatment, radioactive iodine accumulates in the remaining thyroid tissue and cancerous tissue and destroys them. Radioiodine treatment is a targeted radiation therapy because the radiation from radioiodine only destroys the cells that have absorbed iodine. Dietary iodine competes with radioiodine for absorption into thyroid tissue. A low-iodine diet improves the effectiveness of the treatment.

When is a low-iodine diet used?

A low-iodine diet is started two weeks before radioiodine treatment. The diet continues during the radioiodine treatment on the ward and ends when you are discharged.

What does a low-iodine diet consist of?

During the low-iodine diet, avoid foods rich in iodine, as well as dietary supplements containing iodine (e.g., seaweed products), natural products, vitamin supplements, and medications (e.g., iodine-containing cough medicines), as well as antiseptic agents (such as Betadine). Food packaging labels usually indicate if iodized salt has been used in the product. Iodized salt should not be used. You can use non-iodized salt (labeled as "salt" on the packaging) during the diet. The following provides more detailed information on foods suitable for a low-iodine diet and foods to avoid during the diet.

Food group	Suitable for low-iodine diet	Avoid these
Grain product	Flours, hulled grain, flakes, pasta.	Breads and other grain
	Bread, crispbread, muesli, porridge	products made with iodized
	and gruel, made without the use of	salt.
	iodized salt.	
Vegetables,	Fresh, cooked, frozen	Vegetable and potato dishes
potatoes		(for example French fries)
		made with iodized salt.
Fruits and	Fresh, cooked, frozen.	
berries	Jams, marmalades, fruit and berry	
	soups and kissel.	
Dairy product	Small amount of milk with coffee	Liquid dairy products (for
		example milk, soured milk,
		yogurt, viili, quark, cream).
		Cheeses (also cheese
		spread)
Egg	Egg whites	Egg yolk
Meat products	Unmarinated meat, broiler, turkey.	Salted and smoked meats.
	Cold cuts, sausages made without	Cold cuts and sausages made
	the use of iodized salt.	with iodized salt.
Fats	Vegetable oils, margarine	Valio ValSa®-products
Salt	non-iodized salt	lodized salt. Products made
		using iodized salt.
Others	To replace dairy products, you can	Seaweed.
	use various plant-based drinks,	Vitamin supplements and
	yogurts, puddings, and curds. Some	cough medicine, which
	products may contain iodized salt, so	contains iodine.
	please check the package labels	Other salted products (potato
	when selecting products.	chips, salted nuts, spice
		mixtures etc.) made using
		iodized salt.

Contact information

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