

Nuclear Medicine, Churchill Hospital

Radioactive Iodine Treatment for Hyperthyroidism

Information for patients



What is hyperthyroidism?

Your thyroid gland is in your neck, in front of your windpipe. It produces a hormone called thyroxine which acts as your 'body clock', keeping your body working properly. Thyroxine has a direct effect on your heart rate, bowel activity, skin and organs. Hyperthyroidism (also known as Graves' disease, thyrotoxicosis and overactive thyroid) develops when your thyroid gland produces too much thyroxine, making your body clock run too fast.

What is radioactive iodine treatment?

Radioactive iodine uses a form of iodine that is radioactive. Iodine is normally concentrated by the thyroid gland and is used to make thyroid hormone. Radioactive iodine gives off beta and gamma rays (which have similar effects to x-rays) which reduce the activity of the thyroid gland.

Where else in the body does radioactive iodine go?

Most of the radioactive iodine goes to the thyroid. The rest passes out in the urine during the first few days. A small amount is present in saliva and sweat.

What about my tablets?

If you have been given tablets to control your hyperthyroidism, you will need to stop taking them before your radioiodine treatment starts. You can only have radioiodine treatment after you have stopped taking your tablets so please follow the instructions on page **4** carefully.

Also, if you are taking any tablets which contain iodine or kelp (a seaweed which contains iodine), such as vitamin or mineral supplements, you will need to stop taking them at least a week before being treated with radioiodine. (If you have thyroid problems it is best not to take any tablets or vitamins supplement which contain iodine or kelp)

Do I need to change my diet?

Do not eat any seafood, e.g. fish, for seven days before the appointment or for 24 hours following treatment. Do not take cod liver oil tablets for one week before or one week after treatment.

Can I have treatment if I am pregnant or breast feeding?

No. Pregnant women or women who are breast feeding should not be given radioactive iodine. Radioiodine can harm unborn babies and babies that are being breast fed. If you are aged between 12 and 55 you will be asked to provide a urine sample for a pregnancy test unless you have been sterilised or had a hysterectomy. **You should avoid getting pregnant for 6 months after your treatment.**

Are there any risks in having children afterwards?

The treatment does not affect a woman's fertility. Forty years of experience of using radioiodine shows no effect on the health of the children of patients who have had radioiodine. However, it is essential that you avoid pregnancy or breast-feeding for 6 months after radioiodine treatment.

Can I father children after radioiodine treatment?

The treatment doesn't affect a man's fertility, however it is essential that **men avoid fathering children for four months after radioiodine treatment.**

Will there be any danger to my family or friends?

After your radioiodine treatment, your body will contain some radioactivity, which will decrease every day. If you follow the advice you are given, other people may receive only an insignificant radiation dose from you. You will be able to continue shopping, cooking and doing other day-to-day household activities as normal. However,

please take some simple precautions which we tell you about for sometime after your treatment. These are to avoid any unnecessary radiation to your family members and friends.

How is the Iodine given?

You will be given a capsule containing iodine that you will be asked to swallow whole along with some water. The capsule will have no taste to it. It will not make you drowsy. You may drive afterwards.

The amount of radioactivity in the tablet can vary. The consultant referring you for the therapy will decide how much you are to receive.

Should I take any precautions afterwards?

After the capsule your body will contain a small amount of radioactivity therefore it is important that you take some simple precautions to restrict the radiation dose to people around you, especially children and pregnant women who are more sensitive to the radiation.

The easiest way to reduce the radiation dose to others is by reducing the time spent close to them e.g. do not sit close to a person unnecessarily, especially if there is a free seat further away.

You will have been given a separate restrictions leaflet that will list all the restrictions you will need to follow.

Carry the card

You will be given a yellow card with the details of your treatment. You should carry this card with you until all the instructions have expired. You should also carry the card with you if you are travelling through ports or on international flights for six months after the treatment. Some security devices at airports are so sensitive that they may detect that you have had radioiodine treatment even after this length of time.

Will I need to see a doctor after the radiation treatment?

Yes, you will need to see the doctor who referred you for radioactive iodine six weeks after having the treatment. You will need to have blood tests from time to time to monitor the effectiveness of treatment. This will be every few months to start with, then every year.

How many radiation treatments will I have?

Usually one treatment is enough, although sometimes more than one is needed. The blood tests help decide. If your thyroid remains overactive, a further dose of radioactive iodine can be given after a few months.

Are there any short- term side effects?

Most people notice no side effects from the treatment. A few people develop symptoms of an overactive thyroid (such as palpitations and sweating), usually five to ten days after the treatment. For this reason, your doctor may tell you to take a tablet called a beta blocker for a few weeks after the treatment, and they may tell you to start taking your antithyroid tablets again.

Your thyroid may become under active. This could happen within a few months or many years after the treatment. For this reason you will need to have a blood test every year to check that the activity of your thyroid remains within normal limits. This can be done by your GP. If your thyroid becomes underactive you will be given thyroxine tablets to bring the activity back to normal; you would need to take these on a permanent basis.

What is Thyroid Eye Disease?

Thyroid eye disease can occur in people who have an overactive thyroid. The muscles of the eye can swell causing the eyes to push forward. The doctor will check your eyes and may prescribe a short

course of steroids. Very rarely, eye symptoms may only appear after radio-iodine treatment if your thyroid becomes under active. It is important that you have a follow-up appointment and blood tests after the radio-iodine treatment so that the doctor can monitor your thyroid function carefully. Smoking increases the risk of developing thyroid eye disease.

Who do I ask for information?

Please do not hesitate to ring the telephone number given below if you have any further questions or need further advice.

Name: Jane Statham or Karen Olliffe

Telephone: **01865 235804**

Summary of information that is relevant to me:

I must stop my carbimazole/propylthioracil tablets after the last dose on:

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Appointment for radioactive iodine treatment:

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I will restart my tablets on

.....

I will arrange a blood test five weeks after treatment and an appointment to see

..... six weeks after the treatment.

If you need an interpreter or need a document in another language, large print, Braille or audio version, please call **01865 221473** or email **PALSJR@ouh.nhs.uk**

Jane Statham, Superintendent Radiographer
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