

Patient information

Radioactive Iodine Treatment for Hyperthyroidism Your Questions Answered

Imaging Department

For distribution to patients by a Consultant before referral for Radioiodine treatment

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 sometimes 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 Radioiodine Treatment?

Radioiodine treatment uses a radioactive isotope of iodine to cure hyperthyroidism. The thyroid gland has a special property of concentrating within itself any form of iodine taken by mouth or injected. The radioactivity destroys the overactive thyroid tissue and slows down the production of thyroxine. The thyroid gland uses most of the iodine, so only a small amount of radioactivity is needed.

Are there any other options?

People can be treated with surgery or a longer duration of medication. Your specialist will have discussed these options with you before your referral for radioiodine therapy.

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. The letter giving you your appointment for radioiodine treatment will tell you when to stop taking your tablets.

You can only have radioiodine treatment after you have stopped taking your tablets, so please follow the instructions carefully. Also, if you are taking any tablets, such as vitamin or mineral supplements, which contain iodine or kelp (a seaweed which contains iodine), 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 vitamin supplements which contain iodine or kelp.)

How is the Radioiodine given?

The Radioiodine is given either as a drink or as a capsule. The drink contains only a small amount of radioiodine and tastes just like water or may be flavoured with orange juice. The capsule looks like those used for many other medicines and it is swallowed whole with a drink of water.

Where else in the body does Radioiodine go?

Most of the Radioiodine goes to the thyroid gland within a few hours. The rest will pass out of your body in your urine during the first few days after treatment.

How long this will take depends on how much you are given, with larger doses requiring up to four weeks to clear completely from the body.

How long does the Radioiodine take to work?

It can take between a few weeks and several months for the treatment to work. Most people with hyperthyroidism (80–90% of people) are cured by a single dose of radioiodine. If the treatment has not worked within four to six months, it can be repeated.

Is Radioiodine Treatment dangerous?

No, its safety record is excellent. Radioiodine treatment has been given to millions of people worldwide since it was introduced in the early 1940s.

Can Radioiodine Treatment cause cancer?

No. Radioiodine has been used for over 60 years to treat Thyrotoxicosis. Patients treated this way have been studied carefully. There is no increased risk of developing thyroid or any other cancer as a result of this treatment

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

No. Radioiodine can harm unborn babies and babies that are being breast fed. You will not be given radioiodine treatment if you are pregnant or wish to continue breast feeding. You should avoid getting pregnant for six months after your treatment.

Are there any risks in having children afterwards?

No effects on the unborn babies of women who have been treated with radioiodine more than six months before they got pregnant, or on the health of those children, have been shown in over sixty years of experience in using radioiodine treatment. The treatment does not affect a woman's fertility.

Can I father children after radioiodine treatment?

Men should be careful not to father children for six to twelve months after radioiodine treatment.

This is only to ensure compliance with radiation precautions pertaining to contact with pregnant women and small children and does not affect a man's fertility.

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 by the Nuclear Medicine Department, 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, you will need to take some simple precautions for some time after your treatment to stop your family, friends and other people coming into contact with too much of the radiation.

Are there any 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, the 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 gland may become underactive at a time ranging from a few months after treatment to many years later, causing 'hypothyroidism'. In a small number of people, this happens quite soon after radioiodine treatment. The blood tests will show whether this has happened.

If your thyroid gland does become under active, your doctor will give you Thyroxine / Levothyroxine / T4 tablets to replace the thyroxine that your thyroid gland is no longer producing. The tablets are very safe and contain a man-made version of the natural thyroxine your body is unable to produce enough of.

It may take a few months to find the right dose of Thyroxine / Levothyroxine / T4 for you. You will not have to pay prescription charges for these tablets.

Thyroid eye disease (which can develop in Graves' disease) may get worse after the treatment. The doctor will discuss this with you before you have the treatment and may suggest that you take a steroid called Prednisolone for a short time after the treatment.

Any further questions?

Please discuss any questions you have regarding your referral for treatment with your consultant.

Once you have been referred for treatment we will give you more information both before and after your appointment.

Feedback

Your feedback is important to us and helps us influence care in the future

Following your discharge from hospital or attendance at your outpatient appointment you will receive a text asking if you would recommend our service to others. Please take the time to text back, you will not be charged for the text and can opt out at any point. Your co-operation is greatly appreciated

Further Information

Nuclear Medicine Department

Tel: 0151 706 4464

Text phone number: 18001 0151 706 4464

National Societies and Support Groups:

British Thyroid Association (british-thyroid-association.org)

British Nuclear Medicine Society (www.bnms.org.uk)

Author: Imaging Department

Review date: March 2026

All Trust approved information is available on request in alternative formats, including other languages, easy read, large print, audio, Braille, moon and electronically.

يمكن توفير جميع المعلومات المتعلقة بالمرضى الموافق عليهم من قبل انتمان المستشفى عند الطلب بصيغ أخرى، بما في ذلك لغات أخرى وبطرق تسهل قراءتها وبالحروف الطباعية الكبيرة وبالصوت وبطريقة برايل للمكفوفين وبطريقة مون والكترونيا.

所有經信托基金批准的患者資訊均可以其它格式提供，包括其它語言、易讀閱讀軟件、大字

體、音頻、盲文、穆恩體 (Moon) 盲文和電子格式，敬請索取。

در صورت تمایل می‌توانید کلیه اطلاعات تصویب شده توسط اتحادیه در رابطه با بیماران را به اشکال مختلف در دسترس داشته باشید، از جمله به زبانهای دیگر، به زبان ساده، چاپ درشت، صوت، خط مخصوص کوران، مون و بصورت روی خطی موجود است.

زانیاری پیوندیدار بهو نه‌خوشانه‌ی له‌لایمن تراسته‌وه پسه‌ند کراون، نه‌گهر داوا بکرنیت له فۆرماته‌کانی تردا بریتی له زمانه‌کانی تر، نیزی رید (هاسان خویندنه‌وه)، چاپی گه‌وره، شریتی دهنگ، هیلی موون و نه‌لیکترۆنیک‌ی همیه.

所有经信托基金批准的患者信息均可以其它格式提供，包括其它语言、易读阅读软件、大字
体、音频、盲文、穆恩体 (Moon) 盲文和电子格式，敬请索取。

Dhammaan warbixinta bukaanleyda ee Ururka ee la oggol yahay waxaa marka la codsado lagu heli karaa nuskhado kale, sida luqado kale, akhris fudud, far waaweyn, dhegeysi, farta braille ee dadka indhaha la', Moon iyo nidaam eletaroonig ah.