

Radioiodine Therapy for Thyrotoxicosis (Hyperthyroidism)

Nuclear Medicine



Patient information leaflet

This leaflet contains some very important information for you and your family/partner – please read the whole of the leaflet carefully.

What is the scope of this information leaflet?

This information leaflet will give you details about what to expect when you come for your radioiodine therapy. It also covers how to prepare for it and what precautions you will need to take after the therapy.

What is hyperthyroidism?

Your thyroid is in your neck, in front of your windpipe. It produces a hormone called thyroxine. This helps keep your body working properly. Thyroxine has a direct effect on your heart rate, bowel activity and some organs. Hyperthyroidism is when your thyroid produces too much thyroxine, increasing your heart rate and other body functions.

What is radioiodine therapy?

Radioiodine therapy uses radioactive iodine to treat hyperthyroidism. The radioactivity destroys overactive thyroid tissue. This reduces the amount of excess thyroxine that is produced. The thyroid readily takes up the radioiodine, so only a small amount of radioactivity is needed for treatment.

The radioiodine is given as a small capsule, which you swallow with water. After you have swallowed the capsule, you will be able to go home. The treatment will not affect your ability to drive and you will be able to eat and drink as normal.

The amount of radioiodine you will receive depends on the type of hyperthyroidism that you have. You will have a thyroid scan in the Nuclear Medicine department, usually the week before your therapy. This will help the doctor decide on how much radioiodine you will be prescribed. The information about this scan is given in your pretherapy thyroid scan appointment letter.

Are there any alternatives to radioiodine therapy?

Alternatives to radioiodine therapy are to take anti-thyroid drugs or undergo surgery to remove part of your thyroid. However, your consultant has referred you for this therapy because they think it is the best option for you. If you have any questions about alternative therapies, you should talk to your consultant about this.

Do I need to stop taking my thyroid tablets?

If you take Carbimazole or Propylthiouracil (PTU) to control your hyperthyroidism, you will need to stop these before you have the therapy. Your appointment letter will tell you how long you have to stop taking your tablets for, so please read the letter carefully.

How long does it take for the radioiodine to work?

It varies between a few weeks and a few months for the therapy to have its full effect. Most people (around 80 - 90%) only need a single dose of radioiodine. Your doctor may decide that further doses are needed. You would usually have this at least 4–6 months after your first dose.

What are the possible side effects?

Most people don't notice any side effects from the treatment. However you may develop a slightly sore throat over the first couple of days. Occasionally people can develop symptoms of an overactive thyroid, such as palpitations or sweating. This would usually occur within 10 days after therapy.

Is the radioiodine therapy dangerous?

No. It has been used to treat hyperthyroidism for over 70 years. It has safely been used to treat millions of patients. There have been many studies that have shown that there is no significantly increased risk of developing cancer as a result of having this therapy.

Can I have this therapy if I am pregnant or breast feeding?

No. Radioiodine can harm unborn babies and babies who are breast fed. You will need to stop breast feeding your baby if you plan to have the therapy.

Female patients between the ages of 12 and 55, inclusive, may be required to have a urine pregnancy test before receiving radioiodine treatment. If required, you will be given more information about this during your pre-therapy consultation.

Are there any risks to having children afterwards?

The treatment does not affect a man or woman's fertility. As a precaution, women should avoid becoming pregnant for six months. Men should avoid fathering a child for four months after the therapy.

What safety precautions do I need to take after the therapy?

Following the therapy you will receive a safety instruction card advising you on what precautions to take. The aim of this advice is to minimise the radiation dose to friends and family. By following the advice, other people will only receive a very small radiation dose from spending time with you. This will not be dangerous for them.

You will be able to carry out normal day-to-day household activities. However, you will need to reduce the amount of close contact that you have with other people. You will also have to take some simple hygiene precautions. The amount of radioiodine that you receive will determine how long you need to follow these restrictions for.

The basic guidelines are:

Contact with spouse/partner, adults or children over 5 years old:

- You should sleep separately from your partner for the first 11 to 13 days.
- You should avoid spending more than 15 minutes per day in close contact (closer than 1 metre) with your partner, other adults or children over 5 years old for 11 to 13 days.

Contact with children 5 years old and under and pregnant women:

- You should avoid spending more than 15 minutes per day in close contact (closer than 1 metre) with children 5 years old and under and pregnant women for 21 to 23 days.

Work:

You may need to take some time off work. This depends on the type of work you do and how much close contact you have with other people at work. You will need to make sure that you can stick to the restrictions before you can return to work.

If you perform radiosensitive work, such as working with x-ray films or in an airport, you will need to inform your employer.

Travel:

Please do not take public transport for journeys of more than 1 hour for the first 11 to 13 days after your therapy. You will not be able to fly for 21 to 23 days after your therapy.

When using private transport during your restriction period, please sit in the back of the car, on the opposite side to the driver. You should only travel either on your own or with one person in the car. This is to make sure you can keep at least one metre away from them during the journey.

Places of entertainment:

Avoid places that are busy and where you will not be able to comply with the precautions given for the first 11 to 13 days after your therapy.

For example, you should not go to the cinema where you will be close to other people for a long time. Shopping is allowed because you will be passing other people without spending more than 15 minutes in close contact with them.

Hygiene:

Most of the radioiodine that your thyroid doesn't take up will leave your body in your urine and sweat during the first few days after your therapy. Drinking plenty of fluids will help speed up this process.

Normal good standards of hygiene are all that is required to ensure that the radioiodine does not spread to other people. This includes:

- Washing your hands after going to the toilet and before preparing food for other people.
- Washing plates and cutlery that you have used thoroughly before someone else uses them.
- Sitting down to urinate to reduce the risk of any spills.

What happens after my therapy?

You are free to leave the department after your therapy. The therapy will not affect your ability to drive, if you wish to drive yourself home. You may also have a friend or family member drive you home, or use public transport if the journey is less than an hour. **We ask that only a maximum of one other person comes with you for the therapy.** This is so that you will be able to keep your distance from them on the journey home.

If you require hospital transport, please call the Nuclear Medicine department on **01483 406701** to discuss.

You will have a follow-up appointment with the doctor who referred you for this therapy. You will have a blood test before this appointment to see how well the therapy is working. Since the therapy takes at least a few weeks to work, the blood test will usually be done 6–8 weeks after the therapy.

Your thyroid doctor will discuss what to do from that point onwards.

Where is Nuclear Medicine?

The Nuclear Medicine Department is situated in the St Luke's Wing of the hospital on Level A.

From the Main Entrance of the hospital on Gill Avenue, go through the main entrance hall of the hospital, turn left and follow the signs to St Luke's Wing. Go down the stairs or lift to Level A and follow the signs round to the right for Nuclear Medicine.

From the front entrance of St Luke's Wing on Level B, turn immediately to the right and go down the stairs or lift to Level A. Follow the signs round the corner to the right, then left to Nuclear Medicine.

From the Radiotherapy entrance of St Luke's Wing on Level A, go straight through the St Luke's Cancer Centre reception area and down the corridor. At the end turn left and follow the signs to Nuclear Medicine.

Car parking

There is a patient car park at the back of the hospital near the St Luke's wing. This is for cancer patients only. The main car park is situated at the front of the hospital. This is accessed from Gill Avenue. This is for all patients and visitors.

Reference sources

- Royal College of Physicians:
<https://cdn.shopify.com/s/files/1/0924/4392/files/radioiodine-management-benign-thyroid-disease.pdf?15599436013786148553>

Further information

- British Thyroid Association:
<http://www.british-thyroid-association.org/information-for-professionals-and-patients#patientinformation>
- British Thyroid Foundation:
<http://www.btf-thyroid.org/>

Contact details

Royal Surrey County Hospital

Telephone: 01483 571122

Nuclear Medicine Department

Telephone: 01483 406701

Nuclear Medicine Physics

Telephone: 01483 406708

PALS and Advocacy contact details

Contact details of independent advocacy services can be provided by our Patient Advice and Liaison Service (PALS) who are located on the right hand side as you enter the main reception area. PALS are also your first point of contact for health related issues, questions or concerns surrounding RSCH patient services.

Telephone: 01483 402757

Email: rsc-tr.pals@nhs.net

Opening hours: 9.00am–3.00pm, Monday to Friday

If you would like information documents in large print, on tape or in another language or form please contact PALS.

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