

Radioiodine treatment for thyrotoxicosis



Information for patients

Royal Hallamshire Hospital



Your radioiodine treatment

Your doctor would like you to come to the Nuclear Medicine department for your treatment. Below are answers to some questions you may have and some guidelines for you after your treatment. Your appointment letter will also give you more information.

Why do I need treatment?

You have a condition called thyrotoxicosis. This means that your thyroid gland is overactive. Alternative treatments include surgery and long term anti-thyroid medication. Your doctor thinks that radioiodine treatment is the preferred option for you.

How will this treatment work?

To treat this condition we will ask you to take a capsule or a drink of a substance called radioiodine.

This will concentrate in your thyroid gland and treat the condition. Any iodine that does not concentrate in your thyroid gland passes out of your body in your sweat and urine.

How long will the treatment take to work?

It can take between a few weeks and several months for the treatment to work. Most people are cured by a single dose of radioiodine. If the treatment has not worked within six months, it can be repeated.

What will happen when I come for my appointment?

You will be given a small radioactive injection into a vein in your arm to enable us to scan your thyroid. This will not make you feel any different. The scan involves you lying on a scanning bed with the camera above your head and neck for 10 minutes.

We will discuss the radiation protection precautions and answer any specific questions you may have.

After the scan you will see a doctor who will review your scan and blood tests and ensure you are suitable for radioiodine treatment. You will also be asked to sign a consent form at this stage.

You will then be given your treatment as a small capsule to swallow. We will ask you to wait in the department for half an hour while it is absorbed through your stomach.

Please allow 3 - 5 hours for this appointment.

Please be aware that most people will have their scan and treatment on the same day. However, there are some situations where this is not possible and a second visit may be required for the treatment.

What do I need to do before my treatment?

You will need to have a blood test approximately 2 weeks before your treatment. A blood form is enclosed with the date that this is required. Please contact your GP or local hospital to arrange this.

Tablets

Thyroid medication should be stopped before radioiodine treatment. Please follow the instructions in the appointment letter carefully because you will only receive radioiodine treatment if you have stopped taking these tablets.

Women aged 16 - 55 years

A blood test will be taken prior to your treatment to test that you are not pregnant. There is a very small time interval during which a pregnancy cannot be determined by these means. It is therefore advisable that all women who have the potential to become pregnant ensure the use of contraceptives in the 2 weeks prior to their treatment. A positive pregnancy test will result in the treatment being postponed.

Recent CT scans

Please contact the Nuclear Medicine department if you have had a CT scan in the last 6 weeks as we may not be able to give you your radioiodine treatment.

Steroids for thyroid eye disease

A small number of patients may have been diagnosed with thyroid eye disease. For these people there is a small chance that radioiodine may cause a worsening of these eye symptoms. This can be prevented by steroid treatment. If you have any history of thyroid eye disease you may require 2 appointments for this treatment.

What if I can't swallow capsules?

Please contact the department as soon as possible if you are unable to swallow capsules as you may be able to have the treatment as a small drink. The capsule is similar in size to a paracetamol capsule.

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

Please contact the department if you suspect you are pregnant or are breast feeding as we will not be able to give you radioiodine treatment.

What do I have to do after the treatment?

You will be asked to drink plenty of fluids for 1-2 weeks after the treatment. This helps wash the radioactivity out of your body.

After the treatment you will be quite 'radioactive', so we ask you to take certain precautions to protect your family, friends and members of the general public from exposure to the radiation. Depending on your job, we may also ask you to stay off work for a period of time. These precautions are specified later in the leaflet.

Are there any risks with radioiodine therapy?

This procedure uses ionising radiation to treat your thyroid condition. The ionising radiation will go to all parts of your body and can cause cell damage that may, after many years or decades, turn cancerous. We are all at risk of developing cancer during our lifetime. The normal risk is that this will happen to about 50% of people at some point in their life. This procedure may result in a low increase in the chance of this happening to you.

Are there any short term side effects of radioiodine treatment?

Most people notice no ill-effects from radioiodine treatment and feel entirely well afterwards. There is a small chance that you may develop the symptoms of an overactive thyroid (such as palpitations and sweating). This usually happens 5 to 10 days after the radioiodine treatment. If you experience this, please contact the endocrine unit for advice.

A very small number of people experience discomfort in the neck after radioiodine treatment. This is usually mild and usually disappears after a few days.

Will the treatment affect whether I can have children in the future?

For women

There is no long term risk to your fertility from radioiodine treatment. However, because the radioactivity may harm a developing baby it is important that you use reliable contraceptive precautions before treatment and for 6 months after your treatment if you are of childbearing age. If you think you may be pregnant within 6 months of treatment you should inform your hospital doctor.

For men

There is no long term risk to your fertility from radioactive iodine treatment. However, if your partner is of childbearing age it is important that you use reliable contraceptive precautions for 4 months after your treatment as within this time the treatment may cause harm to a developing baby.

Consent for the treatment

Please read the information on the following pages carefully.

This explains the benefits and risks of your treatment. You will be required to sign a consent form to give your agreement for us to go ahead with the treatment. If there is anything you are unsure about, please contact the department directly or discuss it with a member of staff at your appointment.

Name of proposed procedure or course of treatment:

- Radioiodine treatment for thyrotoxicosis (nuclear medicine)

The intended benefits:

- Treatment of thyrotoxicosis

Frequently occurring risks:

- You may experience some neck pain after your treatment
- It is highly likely that you will have an underactive thyroid after the treatment which would require you to have lifelong treatment with Thyroxine
- For around 15% of patients the treatment will not work the first time, in this case you would require a second treatment

Rare risks:

- If you have been told you have thyroid eye disease (inflammation of the eyes caused by an overactive thyroid), this treatment could cause the condition to worsen. You may be referred to an eye specialist and prescribed a steroid to help stop this occurring - see below.

Very rare risks:

- There is a very small risk that the treatment could cause breathing difficulties. This is called tracheal compression and would require emergency hospital treatment.
- There is a very small risk of a flare up in the symptoms of an overactive thyroid, this is called a thyroid storm and would require emergency hospital treatment.

Benefits and risks of any available alternative treatments:

- Alternative treatments include surgery and long term treatment with antithyroid medication

Additional information:

- Female patients should not become pregnant for six months after radioiodine treatment
- Male patients should not father children for four months after radioiodine treatment

Radiation protection instructions for radioiodine treatment

The instructions that you receive will depend on the amount of radioiodine that you receive. Below are guidelines of the precautions you will have to take, but note that this might vary according to the dose. Your radiation protection instructions will be discussed thoroughly with you. You will be given a card to carry for 4 weeks which will give details of your precautions.

If you have any concerns about following the radiation protection instructions, please contact us before your appointment.

The general public

You should avoid public places and places of entertainment for 8 days, for example theatre, cinema, concerts, hairdresser, pub - anywhere where you may be sat beside another person.

In the event of a medical emergency you should attend the doctor or dentist, but should advise them of the radioiodine treatment you have received. All other routine appointments at the doctor's surgery, dentists and optician should be avoided for 8 days after the treatment.

If you regularly have a carer or district nurse, please contact the department before your appointment.

Public transport

You should not travel on public transport on the day of your treatment. You should also avoid long journeys on public transport (over 1 hour), for 1 week after treatment.

Work

You may need to take some time off work. We will provide you with a certificate stating this. The length of time that you need to take off work will depend mainly on how close you are to other people while at work and on the kind of work that you do. We will ask you about your work so that we can give you the right advice. The following examples will give you an idea of the amount of time that you will need to take off work:

- Full-time nursery nurse: 20 days from the day of radioiodine treatment.
- Full-time office worker sharing an office: 16 days from the day of radioiodine treatment.
- Lorry / van driver working alone: no time off work is needed.

Family

Because your family are with you all the time, their exposure to the radiation is much more than that of the general public, so it is necessary to take precautions for longer. The amount of time you normally spend close to your children probably depends on their age. For this reason, the periods of restriction below depend on the children's age.

- Children over 5 years old: avoid close, prolonged personal contact for 15 days.
- Children aged between 2 and 5 years: avoid close, prolonged personal contact for 20 days.
- Children aged less than 2 years old: avoid close, prolonged personal contact for 24 days.

Close prolonged contact is defined as less than 1 metre for more than 15 minutes.

You must sleep separately and avoid sexual contact for 21 days. Whilst the treatment does not affect your fertility in the long term, it is important that both men and women use a reliable contraceptive for 4-6 months after treatment.

Home precautions

The majority of the radioiodine will be excreted in urine and a smaller amount in your sweat and saliva. Good hygiene is important to protect others. For 9 days after the treatment you should follow these precautions:

- Don't share crockery and cutlery (plates, knives, forks, etc) or toothbrushes with others.
- Avoid preparing food that involves a lot of handling of food that cannot be washed. Examples include making pastry or bread.
- Flush the toilet twice after use and pay extra care with hand-washing afterwards.
- Men should sit down when urinating.
- Make sure that no-one else uses your towels and face-cloths.

Pets

Many people worry about their pets. You should try to avoid prolonged, close contact with them for 14 days.

Can we help make your visit better?

If you have difficulty walking or lying flat, or you feel very unwell, please contact the Nuclear Medicine Department and ask to speak to someone about your needs before your appointment. Please let us know if we can help with other difficulties you may have, such as hearing or visual impairment.

I need an interpreter

Please contact us a few days before your appointment if you need an interpreter, as we are not able to use members of your family as interpreters.

Training staff in the Nuclear Medicine Department

Hospitals in Sheffield are teaching hospitals and our Nuclear Medicine department is involved in training staff. There may be students under training in the department who may be observing scans or carrying out the scans under supervision. Please inform us if you do not wish to have a student present.

Frequent questions

What shall I do if I cannot attend?

Please contact the department as soon as possible if you are unable to attend for your appointment. This allows us to give your appointment to another patient and helps to reduce waiting times. If you do not attend and do not telephone the department to warn us, then your referral will be sent back to your doctor and you will not be offered another appointment.

What if I am going on holiday after my treatment?

We ask that you do not travel abroad for three weeks after treatment. After that it is fine for you to travel abroad, but you should carry your radiation protection card for 6 months following your radioiodine treatment. Radioactivity will remain in your body for a period after your treatment. There is a possibility that this will be picked up by the sensitive radiation detectors at some airports, train stations and seaports. Please contact us if you would like to delay your treatment until after your holiday.

What follow-up care will I need?

You will not need any special care after the scan or treatment and your consultant will follow you up with regular blood tests.

Is there a weight limit on the scanner?

There is a weight limit on some of our equipment. Please contact the department if you weigh more than 180kg (28 stone).

Should I have any concerns relating to my religious beliefs?

If you feel that there are any aspects of your scan or treatment procedure that conflict with your religious beliefs, please let us know as soon as possible.

Will I feel different?

You should not feel any ill effects from the scan or treatment. It will not make you sleepy or stop you from driving a car.

Where can I find more information?

If you need to know more about your appointments please contact the reception on the number given on your appointment letter and ask for a member of the Nuclear Medicine team. You may also like to view our website at: www.sth.nhs.uk. If you have any questions about your clinical condition you should contact your doctor.

Car parking

Allow extra time before your appointment as parking is limited.

Northern General Hospital:

A number of pay-and-display car parks are available. However, these do get full quickly. Remember to bring some change to pay for parking.

Royal Hallamshire Hospital:

A pay-on-exit car park is available.

Weston Park Hospital:

Car parking is available. However, there are a limited number of spaces.

Nuclear Medicine, part of the Directorate of Medical Imaging and Medical Physics at:

Northern General Hospital

E Floor (follow purple signs for Vickers corridor)
Herries Road
Sheffield S5 7AU

Satnav: S5 7AT

Reception: **0114 271 4374**

Royal Hallamshire Hospital

I floor
Glossop Road
Sheffield S10 2JF

Reception: **0114 271 2779**

Weston Park Hospital

Ground Floor
Whitham Road
Sheffield S10 2SJ

Reception (RHH): **0114 271 2779**



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