

Radio-iodine Treatment for Hyperthyroidism

Your doctor would like you to have Radioiodine treatment for your thyroid condition and has arranged for you to visit the Nuclear Medicine department. We would like your visit to be as pleasant as possible and hope this document will answer some of the questions you may have.

Please read the following information carefully and keep it until after your treatment.

Should you have any questions regarding your appointment please contact the Nuclear Medicine Department appointments office 09:00am to 5.00pm Monday to Friday on **0300 131 4797 or 0300 131 5853**

WHAT IS HYPERTHYROIDISM?

Your thyroid gland is in your neck, in front of your windpipe. It produces hormones including 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 RADIOIODINE TREATMENT?

Radioiodine treatment uses radioactive iodine to treat hyperthyroidism. The radioactivity acts to destroy thyroid tissue and reduce the production of thyroxine. The thyroid gland takes up a large fraction of the iodine, with the remainder being mostly excreted from the body via the urine.

DO I NEED TO DO ANYTHING BEFORE MY APPOINTMENT?

You should follow a low iodine diet for 7 days before your appointment until 2 days after your appointment. Food high in iodine include fish, seafood, kelp, seaweed, iodinated salt, milk, eggs, plain yoghurt, cheese, turkey, liver, milk chocolate, baked potatoes, white bread and cranberries.

You should not have a CT (Computerised Tomography scan in X-Ray) scan that involved an injection of contrast within 2 months of your radioiodine treatment as these contrasts also contain iodine.

You should have fluids only for 2 hours before your treatment.

WHAT ABOUT MY TABLETS?

If you are taking tablets to control your hyperthyroidism, you will need to stop taking them before your radioiodine treatment starts. If you are taking **Methimazole, Carbimazole, Perchlorate or Propylthiouracil (PTU)** you will need to stop taking them 7 days before your treatment. You should restart these medicines 3 days after your treatment unless your Doctor has instructed you otherwise.

Also, if you are taking any tablets which contain iodine or kelp (a seaweed which contains iodine), such as **cod liver oil, vitamin or mineral supplements**, you will need to stop taking them at least 7 days 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.) Other medications may also need to be stopped before your radioiodine treatment. A member of the Nuclear Medicine department will contact you before your treatment to check whether any medication needs to be stopped.

HOW IS THE RADIOIODINE GIVEN?

The radioiodine is given as a capsule. The capsule looks like those used for many other medicines and you swallow it whole with a drink of water, much like taking paracetamol. If you are unable to swallow capsules you must inform the Nuclear Medicine department as soon as possible, as it may be possible to arrange a liquid alternative.

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 successfully treated with a single dose of radioiodine. If the treatment has not worked after six months, it can be repeated. Where will the procedure take place?

WHERE ELSE IN THE BODY DOES RADIOIODINE GO?

Most of the radioiodine goes to the thyroid gland with smaller amounts going to other parts of the body (such as the salivary glands and breast tissue) within a few hours. The rest will pass out of your body during the first few days after treatment, mostly via the urine. How long this will take depends on how much you are given.

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. This is because the radioiodine would also be taken up in the thyroid tissue of the foetus or breastfeeding baby. **Breastfeeding should be stopped 4 weeks before your treatment** to minimise the amount of radioactive iodine accumulating in your breast tissue. **Breast-feeding can restart again following a subsequent pregnancy.**

If you are female and aged 18 to 60 years you should bring a urine sample obtained on the morning of your treatment. This will be used to perform a pregnancy test. You will not be given radioiodine if there is a possibility that you are pregnant or if you wish to continue breast feeding.

ARE THERE RISKS IN BECOMING PREGNANT OR FATHERING A CHILD AFTERWARDS?

Female patients should avoid becoming pregnant for at least 6 months following radioiodine treatment.

Male patients should avoid fathering a child for at least 4 months following radioiodine treatment.

No adverse 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 seventy years of experience in using radioiodine treatment.

Care should be taken to ensure the use of barrier contraception during intercourse for six-months after having this treatment.

The treatment does not affect fertility in either men or women.

ARE THERE RISKS 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 (having ensured good hand hygiene and excluding anything that involves lots of “hand-time” such as kneading bread) 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 other people coming into contact with too much of the radiation.

How long you will need to do these things will depend on the amount of radioiodine you have been given. Your specialist will give you advice on the precautions before your treatment. You can travel home by public transport as long as you do not spend more than one hour sitting next to the same person on the bus, train or tube – try to keep at least 1 metre from others at all times. You can drive yourself home. If someone else is driving you home, you should sit on the back seat, as far away from them as possible.

HYGIENE

Most of the radioiodine not absorbed by your thyroid gland leaves your body in your urine and sweat during the first 3 days after your treatment. During this time you should; drink plenty of fluids and go to the toilet regularly. Men should sit down on the toilet to avoid getting radioactive iodine on the edge of the toilet. After going to the toilet you should flush it twice. Always wash your hands well with soap and water after going to the toilet.

Ensure that no one else uses your towels and face cloths. Dirty laundry should be washed as soon as possible.

Do not share cups, bottles or cutlery. Wash all your crockery and cutlery thoroughly (a dishwasher may also be used).

OTHER PRECAUTIONS/RESTRICTIONS

Your specialist will advise you about the following activities before your treatment is given. How long these precautions and restrictions will apply for will depend on the amount of radioiodine you receive.

Behaviour Restriction	1st Treatment	Repeat Treatment
Avoid Travel by public transport where journey exceeds 3hrs	11 hours	3 days
Sleep alone Days off work (If you regularly work closer than 2 metres to others) Avoid places of entertainment	13 days	16 days
Keep at least 1m away from persons aged over 5 yrs	13 days	16 days
Keep at least 1m away from children aged 3-5yrs	18 days	22 days
Keep at least 1m away from children aged under 3yrs	23 days	27 days
Time away from pregnant females in same household	Contact the Nuclear Medicine department for advice	

CARRY THE CARD

On the day of your treatment, you will be given a card with the details of your treatment. You should carry this with you until the restriction period ends. You should also carry the card with you if you are travelling through ports or on international flights within three months of your

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 RADIOIODINE TREATMENT?

Yes, you will need to see the doctor you saw at the clinic. A follow up appointment will be made around 2 months after your treatment. You will have to have regular blood tests to monitor how the treatment is affecting your thyroid gland. If you have not received an appointment for a blood test after 6 weeks from your treatment please contact the endocrinology department.

ARE THERE ANY SHORT-TERM SIDE EFFECTS?

Most people notice no side effects from the treatment, while a small number of patients may feel a slight sore throat or dryness in the mouth. A few people may also 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 anti-thyroid 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 – future blood tests will show whether this has happened to you.

If your thyroid gland does become underactive, your doctor will give you thyroxine 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 that your body is unable to produce enough of. It may take some adjustment to find the right dose of thyroxine for you. 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 month or two after the treatment. Smokers have an increased risk of experiencing effects of thyroid eye disease. A referral to an ophthalmologist may also be made by your doctor.

In the highly unlikely event that you become extremely unwell in the following few weeks after your treatment you should seek urgent medical advice and attend A&E if you feel your health is seriously affected. To help the doctor evaluate your condition please ensure they are aware that you have recently had Radioiodine treatment.

MORE INFORMATION

You can get more information about radioiodine treatment and thyroid disease from:

The British Thyroid Foundation
PO Box 97
Clifford
Wetherby
West Yorkshire
LS23 6XD

Phone or fax: 01423 709707 or 01423 709448

Website: www.btf-thyroid.org

CONSENT

Although you consent for this treatment, you may at any time after that withdraw such consent. Please discuss this with your medical team.

Sources of information

British Nuclear Medicine Society (BNMS)

Important information

The information in this leaflet is for guidance purposes only and is not provided to replace professional clinical advice from a qualified practitioner.

Your comments

We are always interested to hear your views about our leaflets. If you have any comments, please contact the Patient Experience Team – Tel: 0300 131 4731 (direct dial) or by email at: esh-tr.patientexperience@nhs.net

Hand hygiene

The Trust is committed to maintaining a clean, safe environment. Hand hygiene is very important in controlling infection. Alcohol gel is widely available at the patient bedside for staff use and at the entrance of each clinical area for visitors to clean their hands before and after entering.

Other formats

If you require any of the Trust leaflets in alternative formats, such as large print or alternative languages, please contact the Equality and Human Rights Department.

Tel: 0300 131 4434 Email: esh-tr.AccessibleInformation@nhs.net

After reading this information are there any questions you would like to ask? Please list below and ask your nurse or doctor.

Reference

The following clinician has been consulted and agreed this patient information:
Dr Perisamy Sathiskumar, Consultant Endocrinologist, ESHT

The directorate group that have agreed this patient information leaflet:
Core Services

Next review date: October 2024
Responsible clinician/author:
Mr Christopher Salt, Nuclear Medicine Modality Manage
© East Sussex Healthcare NHS Trust – www.esht.nhs.uk