Radio-iodine Treatment for Hyperthyroidism

Nuclear Medicine
Patient Information Leaflet

Prepared by the British Nuclear Medicine Society.

The content of this leaflet is intended for general information only. Details of how a scan is carried out may vary from one department to another and may be changed according to individual patient conditions.

British Nuclear Medicine Society
Sir Colin Campbell Building
Triumph Road
Nottingham
NG7 2TU
www.bnms.org.uk

July 2016
Patient_information_leaflet_Thyrotoxicosis_v4.docx
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 radioiodine treatment?

Radioiodine treatment uses radioactive iodine to cure hyperthyroidism. 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.

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. 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 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 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 tastes just like water and only contains a small amount of radioiodine. The capsule looks like those used for many other medicines and you swallow it whole with a drink of water.

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 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 since it was introduced in the early 1940s.
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.

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 four months after radioiodine treatment. The treatment 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, 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.

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 at least a week before your treatment.

If you are given a large dose of radioiodine, you may have to stay in hospital for a few days after the treatment to reduce the risk of other people coming into contact with radiation.

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. 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 leaves your body in your urine and sweat during the first few days after your treatment. Drinking plenty of fluids and going to the toilet a lot will speed this up process.

- Men should urinate (wee) sitting down on the toilet to avoid getting radioiodine on the edge of the toilet.
- After going to the toilet you should flush it twice.
- Always wash your hands well after going to the toilet.
- Make sure that no one else uses your towels and face cloths.
- Wash all your crockery and cutlery thoroughly.

Other precautions

Your specialist will advise you about the following activities at least a week before your treatment is given. How long these precautions will apply for will depend on the amount of radioiodine you receive. Different precautions may apply for different lengths of time, but some may be for up to two to four weeks.

For the time advised:

- Limit your contact with children, especially children under 3 years of age. If you have your own children or have a job where you have contact with children, it is important to talk to the specialist about this as soon as possible.
- Stay more than an arm’s length away from other people.
- Sleep alone.
- Take a few days off work if your job brings you into close contact with other people.
- Avoid going to places like cinemas, theatres, pubs and restaurants, where you may be in close contact with other people.
- Avoid travelling on public transport, apart from your journey home from hospital.

Carry the card

Your specialist will give you a card with the details of your treatment. You should carry this with you until you no longer have to follow any of these instructions. You should also carry the card with you if you are travelling through ports or on international flights for six months after 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 either the doctor you saw at the clinic or your family doctor. You will have to have regular blood tests to monitor how the treatment is affecting your thyroid gland.
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 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 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 a little time to find the right dose of thyroxine for you. You will not have to pay prescription charges for thyroxine 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 month or two after the 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