

Radioiodine Therapy

This information is for patients who are having radioiodine treatment. It explains why you are having treatment, what is involved, any side effects and advice on mixing with other people.

What is radioiodine therapy?

The thyroid gland produces a hormone that regulates the body. This thyroid hormone is partly made from iodine, which occurs naturally in many foods. The thyroid gland takes up iodine and incorporates it into the thyroid hormone. This is then transported around the body.

Radioiodine therapy uses a radioactive form of iodine. When radioactive iodine is swallowed, it is also taken up in the thyroid. The radioactivity affects the function of thyroid cells and reduces the amount of thyroid hormone that the gland produces. This treatment happens gradually as the radioiodine disappears over the next few weeks.

Why do I need the treatment?

The thyroid gland can have a condition that causes it to produce more thyroid hormone than your body needs. The treatment may also be used to reduce the size of an enlarged goitre.

Should I stop my current medication?

If you take antithyroid drugs (Carbimazole or Propylthiouracil), these should be stopped for one week before and after your treatment.

Continue with your other medication as usual. Certain cough medicines contain iodine - you will need to check the labels. If they

contain iodine do not take them for a few days before and after the treatment.

What does the treatment involve?

You will need to go to the Lanesborough Scanning / Nuclear Medicine department which is on the ground floor of Lanesborough Wing. Before your treatment, we will need to check your thyroid. This will involve a small injection in your arm followed by a scan. You will have an opportunity to ask questions about the advice in this pamphlet. We will then give you the radioiodine treatment as a small capsule for you to swallow and we will supply you with some water to help swallow it.

What happens to the radioiodine?

Much of the radioiodine will be quickly taken up by the thyroid gland. Here, it will start to work on reducing the amount of thyroid hormone produced. Your body will excrete (get rid of) any radioiodine that has not been taken up over the next few days. This will mostly be in the urine but also a small amount in sweat and saliva. The radioiodine will gradually disappear over the following weeks.

Are there any immediate effects?

You will feel the same as you did when you arrived at the hospital - not unwell or sleepy. Some patients do notice a slightly sore throat a few days after the treatment. If any other effects are likely, a doctor will have discussed these with you.

Are there any side effects to this treatment?

The thyroid gland may become underactive because of the radioiodine treatment. This means that it produces less than the normal amount of natural thyroid hormone (thyroxine) that the body needs. This could happen within a few months or many years. If the thyroid becomes underactive, you may be given thyroxine tablets.

Do I need to avoid certain food and drink?

Food containing large amounts of iodine (such as seafoods, salt, kelp) and some vitamins and dietary supplements should be avoided for a few days before and after the treatment. Apart from this, you can drink and eat as usual.

Do not eat any food for one hour before and after the treatment.

Is the radiation dangerous?

Radioiodine has been used for over 70 years. Patients treated in this way have been studied carefully to estimate any risks involved. The type of risk studied is that of developing cancer because of the treatment. Research has indicated the possibility of a very small increase in the risk of developing cancer as a result of the treatment. However, because the risks are extremely small, the treatment is considered safe.

The treatment does not affect your fertility. No effect on the health of the children of parents who have had radioiodine has been shown. However, we strongly advise that after radioiodine treatment:

- You should not father children for four months.
- You should not become pregnant for six months.

Is the treatment dangerous for others?

The amount of radiation exposure to other people after treatment is very small. There is no evidence that the level of exposure to others is harmful. Even so, it is important that you carefully read and follow the radiation protection advice in this pamphlet to reduce this exposure even further. You will not be in 'quarantine' or 'isolated' after treatment. We will give you more specific advice for your family and others when you come for the treatment. You will also have the opportunity to ask questions.

What happens after my treatment?

You should avoid public transport for the first day. A private car or taxi home is the preferred method of transport. You are also able to drive yourself. Plenty of fluids should be taken after the treatment, particularly in the first few days, as this will help to clear radioiodine from your body.

Radiation protection advice

The following information is for patients who receive a typical dose (about 500 MBq) of radioiodine. The number of days after the treatment for which you must follow the advice is given below. We will give you more specific advice when you attend for your treatment.

How can others be exposed to radiation?

There are two ways that others may receive a small radiation exposure from the radioiodine given:

- The patient will emit (give off) radiation in the form of gamma rays. These are very similar to medical X-rays. You can minimise exposure to other people by reducing the amount of time that you are very close to them. Creating a little more space between yourself and others will greatly reduce their exposure.
- Transfer of very small amounts of radioiodine to others. For a few days after treatment the radioiodine can pass out of the body in urine, sweat and saliva. This can in turn be transferred on to others. It may easily be avoided by practising good hygiene.

Pregnancy, breastfeeding and sexual contact

- You must inform us immediately if there is any chance that you are pregnant.

- Use barrier contraception (e.g. male or female condom) for sexual activity (for seven days) and limit sexual activity to no more than 30 minutes a day.
- You should not father children for four months.
- You should not become pregnant for six months.
- If you are breastfeeding, you must stop prior to your treatment.

At home

- Reduce the amount of time that you spend in close contact with adults. If you are spending more than a few minutes with someone, ensure that you are at least one metre away (for 12 days).
- Sleep in a separate bed (for 23 days).

At work

- There is no need to take time off unless you are closer than two metres to others for prolonged periods.
- You will need to take time off work if you always or regularly work as close as one metre away from others (up to 12 days).
- If you work with small children or work in very close contact with other people for prolonged periods, the time off work may need to be longer (up to 23 days).

Children and pregnant women

Avoid prolonged close contact with:

- Children up to three years of age and those who need a lot of close contact (for 23 days).
- Children up to five years of age (for 18 days).
- Older children and pregnant women (for 12 days).

Travelling and going out

- Avoid journeys on public transport (for one day).

- Avoid going on a long journey (greater than one hour) if you cannot choose to sit by yourself (for eight days).
- Avoid going to public places where you cannot choose to sit by yourself, such as theatres and cinemas (for three days).

Hygiene

- Keep your own hand and bath towels (for three days).
- Do not prepare food for others. If this is unavoidable, disposable gloves may be worn but remember to wash your hands thoroughly afterwards (for three days).
- Ensure that crockery and cutlery are washed and rinsed thoroughly between use.
If possible, keep a set for your own use (for three days).
- Flush the toilet twice after use (for three days).
- Urinate sitting down (for three days).

More information

You can get more information about radioiodine therapy 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

Contact us

If you have any questions or concerns about radioiodine therapy, please contact the Nuclear Medicine department on 020 8725 1840

(Monday to Friday, 9am to 5pm) and ask to speak to a Clinical Scientist.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.stgeorges.nhs.uk

Additional services

Patient Advice and Liaison Service (PALS)

PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9.30am and 4.30pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough wings (near the lift foyer).

Tel: 020 8725 2453 **Email:** pals@stgeorges.nhs.uk

NHS Choices

NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health.

Web: www.nhs.uk

NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones.

Tel: 111

AccessAble

You can download accessibility guides for all our services by searching 'St George's Hospital' on the AccessAble website (www.accessable.co.uk). The guides are designed to ensure everyone – including those with accessibility needs – can access our hospital and community sites with confidence.

