

Additional information

If you have any concerns or questions with regard to this treatment, or if you need this information in another format such as larger print, please telephone the Clinical Imaging and Measurement Department on the phone numbers below:

- Clinical Imaging and Measurement: **01225 824080**
- Endocrinology Consultant's Secretary: **01225 826232**
- Endocrinology email: ruh-tr.endocrinediabetes@nhs.net

[Royal United Hospitals Bath NHS](#)
Foundation Trust Combe Park,

Bath, BA1 3NG

01225 428331 | www.ruh.nhs.uk

If you would like this leaflet in email form, large print, braille or another language, please contact the Patient Support and Complaints team on 01225 825656 or by e-mail:

ruh-tr.psct@nhs.net

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Advice to Patients Receiving

Iodine – 131 Treatment

Radioactive iodine treatment has been prescribed for you to treat an over-active thyroid. The radioactivity from this treatment will benefit you, but not other people. This information sheet explains the precautions that are necessary to stop others from being exposed to unnecessary radiation.

Please make sure you understand these precautions. You will have the chance to discuss them and ask any questions before you are given your treatment.

Contact telephone numbers are provided on the back of this leaflet, in case there is information that you would like to discuss before your appointment

Radioactive Iodine Treatment

Radioactive iodine has been used for over 80 years to treat thyroid conditions. It comes in the form of a capsule (similar in size to antibiotics) which is taken with water. The thyroid gland naturally takes up the iodine from the food we eat, so once it has been digested, the radioactive iodine is absorbed by the thyroid gland and destroys some of the thyroid tissue. The aim of the treatment is to reduce the over-activity of the thyroid gland (thyrotoxicosis) or shrink it in size (goitre).

Pregnancy

Your Endocrinology Consultant must be aware of whether you are pregnant so that they can consider the risk to an unborn child. If you are female, and between the ages of 12 and 55, you will be asked to complete a form confirming that you are not pregnant.

If there is any possibility of pregnancy, you will also be asked to provide a urine sample for a pregnancy test on the day of your treatment appointment. Your Consultant may give you a sample pot so that you can bring a urine sample with you to your treatment appointment – the urine sample must be produced on the same day as your treatment appointment.

If your gender was female at birth and you are transgender or non-binary, please inform your Consultant so that they can rule out the possibility of pregnancy before your treatment. This information will not be recorded or shared without your consent.

Breastfeeding

If you are breastfeeding, please let your Endocrinology Consultant know so that they can discuss the timing of your treatment with you. It is likely that you will need to stop breastfeeding at least six weeks before your treatment, unless you are able to take a medication which stops the production of milk.

You will not be able to re-start breastfeeding after the treatment

Taking regular medication before your treatment

If you are taking propylthiouracil (PTU) tablets, please stop taking them fourteen days before treatment.

If you are taking Carbimazole tablets, please stop taking them seven days before your treatment.

If you are taking thyroxine tablets, please stop taking them seven days before treatment.

If you are taking any vitamin or mineral supplements that contain iodine or kelp, you should stop taking them seven days before treatment.

If you are taking amiodarone, please discuss this with your Endocrinology Consultant as soon as possible.

Please continue to take any other medications that have been prescribed for you by your doctor for other medical conditions.

Dietary adjustments prior to treatment

For two weeks before your treatment, avoid products that are high in iodine. This is to ensure that you have a high uptake of the radioactive iodine into your thyroid.

Advice for a suitable low iodine diet to follow can be found online (e.g. Cancer Research UK has a useful webpage).

Some examples of products that are high in iodine to avoid are:

- o Fish and other seafood
- o Iodinated salt or supplements that may contain iodine
- o Large amounts of dairy products (more than 50g a day)
- o Raw green vegetables such as spinach and broccoli (cooked is ok)

Summary of Restriction Times after Treatment

Advice after a 370MBq treatment	Time
Stay more than 1m away from all people	6 days
Stay more than 1m away from children under 10	11 days
Stay more than 1m away from children under 5	16 days
Stay more than 1m away from pregnant women, and children under 3 years of age	21 days
Do not share a bed with another person Or if partner signs consent to be a 'carer and comforter' and is not pregnant, there is no restriction	15 nights

Advice after a 555MBq treatment	Time
Stay more than 1m away from all people	10 days
Stay more than 1m away from children under 10	14 days
Stay more than 1m away from children under 5	20 days
Stay more than 1m away from pregnant women, and children under 3 years of age	25 days
Do not share a bed with another person Or, if partner signs consent to be a 'carer and comforter' and is not pregnant,	22 nights 2 nights

Pregnancy and conception after your treatment

It is important that you do not become pregnant for at least 6 months after treatment. For men who have received radioiodine treatment, you should not cause a pregnancy for at least four months after your treatment.

Travelling after your treatment

Some airports, seaports, train stations, bus stations and major sporting event venues have sensitive radiation detectors that could be triggered by the radioactivity following your treatment.

You will be given a Radiation Protection Certificate to carry with you for **three months** following your treatment to show to officials if necessary.

Information for hospitals or care homes

Within the **three months** following your treatment:

If you are admitted to a care home or hospital (other than the RUH), please ask them to contact the RUH Clinical Imaging and Measurement department. Their employer might need to register with the Health and Safety Executive to show that their staff are aware of the radioactivity that is present after your treatment.

If surgery is required within 3 months of treatment, contact Clinical Imaging and Measurement for radiation risk assessment.



CT scanning prior to treatment

If you have had a CT scan with contrast (a drink or injection) within the two months before your treatment date, please inform the Clinical Imaging and Measurement Department as soon as possible because we may need to delay your treatment slightly.

Who can accompany you for this treatment?

Due to the radiation involved, please **do not** bring along a child or a pregnant woman on the day of your treatment.

Finding the Clinical Imaging and Measurement Department:

The Department is located in Zone C, Department C16.

How is the treatment performed?

You will be given a capsule to swallow with some water. The capsule contains radioactive iodine which is used to treat the thyroid. It will not make you feel any different. It can take four to six weeks for you to feel its benefits.

As with standard medicinal capsules, the capsule may contain gelatine derived from animal products.

What to expect after the treatment

The capsule should not immediately affect you in any way. The treatment will not affect your ability to drive home so it is not necessary for anyone to accompany you unless you so wish.

The radioactive iodine is used as sparingly as possible and the benefits of this treatment far outweigh the risk from the radiation. You should drink plenty of fluids during the three days following your treatment to help the radioactive iodine leave your body.

Most people notice no side effects from this treatment. A few patients may experience a recurrence of the symptoms they had when they were diagnosed with an overactive thyroid – usually five to ten days after treatment. If you get these symptoms, you may need a short course of betablockers or to restart your anti-thyroid medication (Carbimazole or Propylthiouracil).

Please contact the Endocrinology Specialist Nurses (card given on day of treatment) for advice.

There is a chance that your thyroid may become underactive in the months or years after treatment. It is important that this is identified, and this is why blood monitoring is important. Your Consultant will have discussed your post treatment follow-up with you, but check with them if this is not clear.

A small number of patients may need to return for a repeat treatment. If it is necessary to have a repeat treatment, there needs to be at least six months between treatments, usually more.

Transport on the day of your treatment

When travelling home after your treatment, you should not sit next to the same person for longer than 1 hour. You can reduce the radiation dose to another person by sitting diagonally opposite one another. For example, one person driving, and another person in the rear on the other side of the car.

There are no radiation restrictions for transport after the day of your treatment. However, if you travel next to the same person every day, please ask your Consultant for advice on whether you should travel separately for one or two weeks.

General radiation protection advice

In the seven days following your treatment:

- o You should sit down when using the toilet, flush the toilet twice after use, and then wash your hands carefully.
- o Bath towels, hand towels and facecloths should not be shared with anyone else. You should shower daily.
- o When preparing food, wash your hands frequently and keep a hand towel for your own use. Wash all crockery and cutlery thoroughly after you have used them.
- o Medical procedures such as blood tests or urine collection should be avoided (see last page for a note about surgery).

There is no need to wash your clothes separately from the main family wash. If you vomit, or are incontinent of urine, within 24 hours of your treatment, please contact the Clinical Imaging and Measurement Department (details will be on your 'Iodine-131 Therapy Instruction Card' and are also on the back of this leaflet).

Restriction of contact with others

After your treatment, you will need to avoid close contact with people so that they are not exposed to radiation unnecessarily. This is especially important for people that you have contact with every day, such as family members.

Restriction times depend on the age of the other person, and are summarised at the end of this leaflet. During these times, you should stay at least 1m away from each other. You can reduce their radiation doses even more by staying further apart. Very brief close contact is fine, such as passing people as you move around your home.

When you receive your treatment, you will be given an 'Iodine-131 Therapy Instruction Card' that shows your restriction times. By following this guidance, the radiation exposure to people around you is less than half the radiation they receive from natural sources every year. You should carry the card with you until the last date written on it.

If you have sole responsibility for the care of a young child, it is recommended that you make alternative arrangements for child care for the period when close contact is not allowed. This may be up to 25 days. This should be discussed with your Consultant before your treatment.

Partners

You should sleep alone for a while after your treatment because sharing a bed will expose the other person to radiation.

If you have separate beds in the same room, there should be a gap of at least 1m between the beds during the restriction time.

If your partner is not pregnant, and is willing to receive a higher dose of radiation, they can sign a consent to be a 'carer and comforter'. The radiation dose that they will receive is similar to the radiation that they receive from natural radiation sources every two years. Your partner should continue to follow the standard daytime restriction advice, but the restrictions about sleeping alone can be relaxed.

Healthcare assistance

If you receive assistance from a friend or family member, they could receive a radiation dose when they are very close to you. Your Consultant will give you a leaflet for them, which explains simple precautions which keep their radiation dose low. Please also let your Consultant know if a friend or family member is likely to be very close to you for more than 15 minutes per day, or within 1m for more than one hour per day.

If a healthcare worker visits you after your treatment, their employer might need to register with the Health and Safety Executive to show that their staff are aware of the radioactivity that is present after your treatment. Your Consultant will give you a leaflet for them which explains this, along with the simple precautions which keep their radiation dose low.

Returning to work

You may return to work on the day following your treatment.

You should discuss your return to work with your Consultant if:

- o You are likely to be closer than 2m to another person for a prolonged period of time (more than 4 hours per day), or
- o You are likely to be in close contact with another person for more than 15 minutes per day

If your work involves food preparation, you should wear gloves during this work for at least 7 days.

If you perform radiation-sensitive work, or work with radioactive materials, please discuss your return to work with your employer.