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# Radioiodine treatment for thyrotoxicosis

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**Nuclear Medicine**

**Patient Information**





## Contents

<b>What is radioiodine treatment?</b>	<b>1</b>
<b>Why do I need this treatment?</b>	<b>1</b>
<b>Is there an alternative treatment?</b>	<b>1</b>
<b>How is the iodine given?</b>	<b>1</b>
<b>Will I have a reaction?</b>	<b>1</b>
<b>Where else does the radioiodine go?</b>	<b>1</b>
<b>What preparation will I need?</b>	<b>2</b>
<b>Are there any extra risks in having children afterwards?</b>	<b>2</b>
<b>What if I am pregnant?</b>	<b>2</b>
<b>Can I continue to breastfeed?</b>	<b>2</b>
<b>Will there be any danger to my family?</b>	<b>3</b>
<b>What precautions are necessary?</b>	<b>3</b>
<b>Will I need to see a doctor after the radioiodine treatment?</b>	<b>3</b>
<b>How many treatments will I need?</b>	<b>4</b>
<b>Are there any long term effects?</b>	<b>4</b>
<b>Further information</b>	<b>4</b>
<b>Contact details</b>	<b>4</b>
<b>Instructions for patients receiving radioiodine</b>	<b>5</b>



## **What is radioiodine treatment?**

Radioiodine is a radioactive form of iodine. Iodine is part of everyone's diet and is necessary for the normal functioning of the thyroid gland. The thyroid controls the speed at which the body works (metabolism), for example the rate of breathing or heartbeat. Like ordinary iodine, radioiodine is taken up by the thyroid cells and will therefore destroy a part of the thyroid gland. The treatment is painless.

## **Why do I need this treatment?**

You have a condition called thyrotoxicosis. This means that your thyroid gland is overactive. The gland is situated in the neck and controls the rate at which many body processes take place. If it is not properly treated, your health may be affected.

## **Is there an alternative treatment?**

You may have been given tablets to suppress the activity of your thyroid. However, these can cause side effects if taken long term.

## **How is the iodine given?**

Radioiodine is usually given as a capsule with some water and should be followed by a warm drink. Please tell us in advance if you have difficulty swallowing capsules. The radioiodine is also available as a liquid.

## **Will I have a reaction?**

This would be very unusual.

## **Where else does the radioiodine go?**

Most of the radioiodine is taken up by your thyroid. The rest of the radioiodine passes out of your body mainly through the urine. A small amount is present in your saliva and sweat.

## What preparation will I need?

If you are taking tablets to suppress your thyroid activity you will be asked to stop taking these for a few days before and after the radioiodine treatment.

You will also need to deprive your thyroid of normal iodine to increase the effectiveness of the radioiodine. Therefore you will need to avoid foods that are rich in iodine.

**Do not eat:** fish, seafood or foods that are artificially coloured red or pink (E127) such as canned and glacé cherries, canned strawberries, Spam, salami, some pasties and sweets.

**Do not take:** cough medicine, iodised salt, sea salt, cod liver oil, vitamin and mineral supplements.

**Do eat:** fresh meat, vegetables, fresh fruit, pasta and rice. These are all low in iodine.

## Are there any extra risks in having children afterwards?

No. Fifty years of experience of using radioiodine shows no effect on the health of the children of patients who have had radioiodine. However, we do advise you to avoid pregnancy or fathering a child for at least four months after the radioiodine treatment.

## What if I am pregnant?

Radioiodine must not be given during pregnancy. If there is any possibility that you may be pregnant, a pregnancy test must be carried out before radioiodine is given.

## Can I continue to breastfeed?

No. Breast feeding must stop following radioiodine treatment.

## **Will there be any danger to my family?**

In this treatment, radiation will be used for your benefit and is considered to outweigh any possible risk. However, there are a few simple precautions that you can follow to minimise any possible hazard to other people. We will give you written guidelines detailing these precautions before your treatment.

## **What precautions are necessary?**

The precautions described in the written guidelines (given to you separately) will take account of your personal circumstances and are very similar to what you would do if, for example, you had influenza (flu).

You should avoid spending a lot of time with any person and avoid staying close (less than one metre) to anybody for a few days after taking radioiodine. This may mean that you should not return to work, sleep with your partner or go to a cinema or restaurant during the specified period. You may also need to restrict journeys on public transport and only undertake long journeys (two hours or more) if unavoidable. Close contact with pregnant women and children under 16 years should be avoided wherever possible. Children under two years should be looked after by someone else for a few days. If possible, arrange for them to stay with relatives or friends.

It will help to wash your hands frequently, especially before preparing food. Cutlery, crockery, towels and bed linen should not be shared with others. However, after washing they are completely safe. There is no need to wash them separately.

## **Will I need to see a doctor after the radioiodine treatment?**

Yes. You will need to contact your endocrinologist to arrange an appointment six to eight weeks after the radioiodine treatment. You will also need to have a blood test to check how your thyroid gland has responded to the treatment. This will be organised by your endocrinologist.

## How many treatments will I need?

Often only one treatment is needed to control the thyroid gland. Occasionally, a second or third treatment is necessary.

## Are there any long term effects?

Radioiodine is a very safe treatment. However, your thyroid gland may become underactive after your treatment. This could happen within a few months or many years after the treatment. That is why blood tests to check the function of your thyroid are important and should be carried out regularly for the rest of your life. If your thyroid becomes underactive, you will be given thyroxine. This is the same hormone that is normally produced by the thyroid and has no side effects.

## Further information

For more information about thyroid disease and its treatment you can contact:

The British Thyroid Foundation

Tel: 01423 810 093

[www.btf-thyroid.org](http://www.btf-thyroid.org)

## Contact details

If you have any questions please contact us:

### **Nuclear Medicine Department**

Tel: 020 8661 3762 / 3286

Fax: 020 8643 6761

Alternatively, please call

**The Royal Marsden Macmillan Hotline: 020 8915 6899**

(available 24 hours a day, 7 days a week)



## Instructions for patients receiving radioiodine

<p><b>Please stop your carbimazole (Neomercazole) or propylthiouracil (PTU) on:</b></p> <p><i>All other medicines should be taken as instructed.</i></p>	
<p><b>Please avoid adding sea salt to your food or eating fish, seafood, vitamin tablets or cough linctus on:</b></p>	
<p><b>Please report to the Nuclear Medicine Department, Sutton for radioiodine capsule on:</b></p>	
<p><b>Please recommence your carbimazole (Neomercazole) or propylthiouracil (PTU) on:</b></p>	

## Notes and questions

## References

This booklet is evidence based wherever the appropriate evidence is available, and represents an accumulation of expert opinion and professional interpretation.

Details of the references used in writing this booklet are available on request from:

The Royal Marsden Help Centre

Freephone: 0800 783 7176

Email: [patientcentre@rmh.nhs.uk](mailto:patientcentre@rmh.nhs.uk)

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Should you require information in an alternative format, please contact The Royal Marsden Help Centre.



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