

## Radiology

# Nuclear Medicine: Radioactive iodine treatment

### About Radioactive Iodine Treatment

You have been sent an appointment to receive radioactive iodine treatment for a condition of your thyroid. The treatment itself involves swallowing a capsule containing radioactive iodine with some water.

After the treatment, the iodine concentrates in the thyroid gland and the radiation it gives out will reduce the activity of the thyroid, and so improve your symptoms. The capsule has no taste and should not make you feel any different.

**The capsule may contain gelatine derived from animal products.**

### Radioactive Iodine Treatment and your Medication

Your doctor will have instructed you to stop taking any thyroid drugs for a period of \_\_\_ **days** before you come for your treatment.

### Radioactive Iodine Treatment and Radiation Risk

Large amounts of radiation can be harmful and it is assumed small amounts, as with this treatment, will have some small risk of harm. Doctors consider the amount of risk before undertaking an investigation (e.g. x-ray) or treatment with radiation and ensure the benefit to the patient far exceeds any possible risk of harm. Your doctor will have discussed with you the risk of harm from the radiation. For more information about this please contact the Nuclear Medicine department on 024 7696 7050.

### Restrictions after the Treatment

After the treatment, your body will contain some radioactivity which will



## Patient Information

decrease every day. Within a few hours, most of the radioactive iodine will have gone to your thyroid. The rest will leave your body in your urine during the first few days after treatment. A small amount will also be present in your saliva and sweat.

The amount of radiation other persons will receive from you is small. However, in order to keep this as low as possible, there are certain restrictions that we ask you to follow for a few days immediately after treatment. These restrictions are based on three simple principles:

- **Distance** – the closer you stand to someone, the more radiation they will receive. Even standing a few metres away will greatly reduce their radiation dose.
- **Time** – the longer you stand close to someone, the more radiation they will receive. Try to minimise the time spent in close contact with other people.
- **Hygiene** – for a few days following treatment your urine, saliva and sweat will contain radioactive iodine. Good hygiene can prevent the radioactive iodine being transferred to other people.

The restrictions and guideline periods for which they apply are summarised below. Exact dates will be given to you at your appointment on a yellow instruction card. You must carry this card with you at all times until the restriction period is over.

### **1. The following restrictions apply for \_\_\_ days post treatment:**

- Avoid close contact with pregnant individuals and children under the age of 5.
- Do not sleep in the same bed as a child or pregnant woman.
- Arrange for children under the age of 5 to be cared for by someone other than yourself.
- Do not return to work if it involves close contact with children/pregnant individuals, handling food or working with radiation sensitive materials.

### **2. The following restrictions apply for \_\_\_ days post treatment:**

- Avoid close contact with adults and children over the age of 5.
- Sleep in a separate bed from your partner.

## Patient Information

- Do not return to work if it involves working less than 2 metres from the same person for a large part of the day.
- Do not visit places of entertainment or places which are likely to be crowded, where you may be close to the same person for more than 1 hour (i.e. cinemas, theatres and restaurants).
- Avoid travel by public transport for periods longer than 1 hour.
- Observe hygienic precautions to avoid contamination of others:
  - Do not prepare food for others. If unavoidable, wear disposable gloves.
  - Reserve crockery and cutlery for your own use.
  - Be particularly vigilant in matters of hygiene when using the toilet (i.e. flushing after each use and thorough hand washing). It is preferable male patients are seated when passing urine.
  - Make sure no one else uses your towels, face cloths or toothbrush.

**Note:** where we ask you to avoid '*close contact*' do not get closer than 1 metre (about 3 feet) to a person except for occasional very brief periods.

## Travelling Home after the Treatment

After the treatment, we will ask you to sit in our waiting room for 20 minutes, after which you will be free to go home. Ideally, you should travel home alone, driving or walking. If someone else is driving, you should sit alone in the back seat, diagonally opposite them to maximise the distance between you. Pregnant individuals and children should not accompany you when you come for your treatment. You may travel home by public transport provided the journey is less than one hour.

## Possible Side Effects of the Treatment

Most people notice no side effects from the treatment. You may experience a slight increase in the symptoms of your overactive thyroid, usually 5 - 10 days after the treatment. For this reason, your doctor may tell you to re-start your anti-thyroid tablets. This is normal, but if your symptoms become severe or are causing you concern, please contact the doctor who referred you for treatment.

As a result of the treatment, your thyroid may become underactive. This could happen at a time ranging from a few months to many years later and

## Patient Information

can be detected by blood tests. If your thyroid becomes underactive you will be given thyroxine tablets to bring the activity back to normal. You will need to take these on a permanent basis.

If you have thyroid eye disease this may get worse following treatment. Smoking increases the risk of developing thyroid eye disease.

## Follow Up Appointment

It takes about 6-8 weeks for the treatment to work. A few months after the treatment you will have a follow-up appointment with the doctor who referred you. They will perform blood tests to check the effectiveness of the treatment. Usually, a single treatment is enough, but if your thyroid remains overactive, a second treatment can be given.

## Individuals of Child Bearing Age

If you are pregnant or are breastfeeding your infant, the treatment must be delayed. Individuals of child bearing age will be asked to confirm that there is no possibility that they may be pregnant or breastfeeding before treatment. Individuals are advised to take effective contraceptive precautions for **six months** following the radioactive iodine treatment.

## Men of Reproductive Capacity

Men are advised not to father a child for **four months** following the radioactive iodine treatment.

## Ports and Airports

There is a possibility that you may trigger radiation alarms at ports and airports for up to three months after radioactive iodine treatment. If you decide to travel you may have to explain your treatment and the reason for the false alarm to the authorities. You should take this letter and the yellow instruction card that you will receive at your appointment with you as supporting evidence.

If you plan to go travelling within 3 weeks of treatment please contact the Nuclear Medicine department for advice.

## Patient Information

### Contact Us

If you have a question about this information please contact the Nuclear Medicine Physics Office on 024 7696 7050 or email

[Nuclear.Medicine@uhcw.nhs.uk](mailto:Nuclear.Medicine@uhcw.nhs.uk).

In addition please contact us if:

- You have had any radiographic imaging involving contrast agents (i.e. a CT scan) in the previous 3 months
- You have a problem with incontinence or vomiting
- You cannot swallow capsules
- You live in a nursing home or receive nursing care at your home
- Your partner or carer provides essential care for you
- For any reason you cannot follow the restrictions described in this letter

The Trust has access to interpreting and translation services. If you need this Information in another language or format please contact 024 7696 8212 and we will do our best to meet your needs.

The Trust operates a smoke free policy.

To give feedback on this leaflet please email [feedback@uhcw.nhs.uk](mailto:feedback@uhcw.nhs.uk)

#### Document History

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