



**Wolverhampton
Diabetes Care**

Radioiodine Treatment for Hyperthyroidism

What is radioiodine?

Iodine is a natural mineral found in your diet. In a radioactive form it is called radioiodine. When radioiodine is given to any person it is taken up by the thyroid gland.

When is radioiodine treatment used and what are its benefits?

Radioiodine treatment is usually offered to patients with an overactive thyroid gland if a course of treatment with tablets does not lead to a long-term cure.

Radioiodine permanently slows down the thyroid gland, lowers the level of the thyroid hormone in the blood and cures the patient with an overactive thyroid gland.

Are there any options?

In some cases the removal of part or whole of the thyroid gland by undergoing an operation is an option. In others long-term use of a small dose of tablets can be considered.

The most appropriate choice of treatment is made after discussion between the patient and the treating doctor.

How is the treatment given?

You will be asked to swallow a colourless and tasteless liquid or a capsule containing the radioiodine.

You will need to come to hospital on 2 days. On day 1 you will have a test dose and on day 2 the full dose of radioiodine will be given.

Your thyroid tablets may need to be discontinued for a few days before taking radioiodine. Further details about your thyroid tablets and changes in diet will be sent to you with your appointment letter.

How long will the radioiodine stay in my body and how quickly will it work?

Most of the radioiodine will be taken up by your thyroid gland over the next 2 or 3 days. The rest will be passed out in your urine over the next few days. A tiny amount leaves in saliva and sweat.

Radioiodine works slowly over a few weeks after it is taken and you may need to restart your thyroid tablets for a short period during this time.

Are there any side effects?

Radioiodine can sometimes cause slight discomfort on your neck and face.

During the first 2 weeks after taking radioiodine there can be a temporary increase in the level of the thyroid hormone in your blood. This usually gets better within a few days.

There is a high likelihood that the radioiodine treatment will result in underactive thyroid gland (8 out of 10 patients may have an underactive thyroid, 10 years after treatment). This could happen in a few months or many years after treatment. You will therefore need regular blood tests following this treatment. An underactive thyroid condition is easily treated with thyroxine tablets, which contain natural thyroid hormone and are very safe.

In patients who have an active thyroid eye disease, radioiodine treatment may lead to a significant increase in eye symptoms, in 5 out of 100 cases. This is more common in patients who smoke. In view of this risk, radioiodine therapy is usually not given to patients who already have an active thyroid eye disease.

If it is not possible to avoid radioiodine in such patients, steroid tablets may be given along with radioiodine, which reduces this risk to less than 1 out of 100 patients. In patients who do not have thyroid eye disease before radioiodine treatment, the chances of developing thyroid eye disease are much lower (1 out of 100 patients).

Can radioiodine treatment cause cancer?

Radioiodine has been used for over 50 years and patients who have received this treatment have been studied very carefully. The view is that there is no significant increase in the risk of developing cancer as a result of this treatment.

Can I have radioiodine if I am pregnant or breastfeeding?

No. Pregnant women should not be given radioiodine and breast feeding needs to be stopped before radioiodine treatment.

It is absolutely essential to avoid pregnancy or breastfeeding for 6 months after radioiodine treatment.

Male patients should avoid fathering a child for 4 months.

Are there any risks to future pregnancy?

Radioiodine therapy has not been shown to reduce the chances of pregnancy in future.

It is not known to have any harmful effect on the growth of the baby in the womb during any future pregnancies.

No harmful effects have been noted on the health of children born to mothers who have had this treatment.

How many treatments will I need?

One treatment is usually enough in 85 out of 100 patients. If the thyroid gland remains overactive 3 to 6 months after the first dose of radioiodine, a second dose (in about 15 out of 100 patients) and very rarely a third dose may be required (in 2 out of 100 patients).

What precautions do I need to take after receiving radioiodine therapy? Is there any danger to my family or friends?

Some simple precautions are required to reduce unnecessary radiation to others. Detailed instructions will be given to you separately.

In general, the following points may apply:

- If you have children less than 3 years of age, it is necessary to arrange for them to be looked after for around 2 weeks after receiving radioiodine.
- Sleep apart from your partner for a few days.
- You will need to avoid visiting crowded public places and journeys on public transport, if the journey exceeds 1 hour.
- You should set aside a toothbrush, a set of cutlery and crockery for your own use and wash these separately for 3 days following treatment.
- It would be advisable to wear kitchen gloves when preparing food for other individuals.

How long should I stay away from work?

In general, you can return to work within a few days. This may be longer if your job involves:

- Handling food.
- Working closely with the same individual for most of the working day (i.e. if you stand within 1 metre of the same person).
- Working with young children or pregnant women.
- Radiosensitive work.

If your job involves any of the above, you must inform the hospital staff so that you can be advised on when to return to work.

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

You should be seen by a doctor at around 6 weeks, 3 months, 6 months and 12 months after radioiodine therapy. On each occasion you should have a blood test during the week before your appointment.

On the day of receiving treatment please ensure that a 6 week appointment is made and that you obtain a form for a blood test.

What should I do if I have any more questions?

On the day of your treatment you will need to provide written consent for this procedure. If you have any questions before this please telephone one of the following contact numbers:

Diabetes Centre: 01902 695310

Medical Physics Department: 01902 695522

Further information can also be obtained from the following website: www.british-thyroid-association.org