**Information for patients having radioiodine treatment (400MBq)**

***What is Radioiodine Treatment?***

Radioiodine treatment uses radioactive iodine to cure hyperthyroidism. The radioiodine is concentrated in your thyroid where the radioactivity destroys the overactive thyroid tissue and slows down the production of thyroid hormones. Radioiodine treatment has been safely given to millions of people since it was introduced in the early 1940s.

If you have any questions about your radioiodine treatment, please contact Medical Physics at the Western General Hospital on **0131 537 2155**.

***Administration***

You will be given a small capsule and asked to wash it down with some water. You will then be asked to wait in the department for 10 – 15 minutes before being allowed to leave. **Please do NOT bring children with you to your appointment.**

***Are there any side-effects?***

Most people do not notice any side-effects from the treatment. Some people occasionally get a transient soreness at the front of the neck (where your thyroid gland is located) or soreness in the cheeks (where your salivary glands are located). After a time (ranging from a few months to many years after treatment), your thyroid gland may become underactive. If this happens your doctor will give you Levothyroxine tablets to replace the thyroid hormones that your thyroid gland is no longer producing. You will have blood tests to monitor how the treatment is affecting your thyroid gland. It is important that your thyroid blood tests are checked at least once a year at a hospital clinic or by your GP.

***What are the risks?***

Any contact with radiation carries an additional risk of developing cancer in future. However, this risk is much smaller than the risks associated with continuing to have an overactive thyroid. The amount of radioactivity in your body will decrease each day.While the radioiodine is in your body, you (and your bodily fluids, faeces and urine) are slightly radioactive and any contact you have with another person will introduce them to a source of radiation. The degree of risk associated with this depends on the age of the other person - children are more susceptible than adults. In all cases the additional risk is small and can be easily managed by following the precautions set out on the page 2 of this document.

Some studies suggest that radioactive iodine treatment can worsen thyroid eye disease, which occasionally occurs in people with Graves’ disease. Following radioiodine treatment, if you notice any change in your eyesight or if you develop any new pain in your eyes, redness, swelling, watering or double vision, please contact your consultant immediately.

***Carry the card***

Following your radioiodine treatment you will be given a card with the details of the treatment on it and a summary of the precautions you should take. Carry this card with you for reference for up to six months following your treatment. Some security devices at airports, ports and large events (e.g. football matches) have detectors which are so sensitive that they may detect the radiation in you even after this length of time. The card will allow you to show that you have had radioiodine treatment.

***Time and distance***

The radiation dose another person gets from you depends on how far away they are from you and how long they spend with you. The further you are away from them and the less time you spend with them, the lower the dose they are exposed to.

***Drugs***

Your consultant will tell you whether or not you should continue to take your thyroid drugs (e.g. Carbimazole, Levothyroxine) prior to and following treatment.

***What impact does COVID-19 have on my treatment?***

A small proportion of people with COVID-19 become very unwell and require admission to hospital. These individuals are highly infectious and require specialist precautions to be taken to prevent transmission of the coronavirus to other patients and staff. It is very important that people who have received radioactive iodine do not develop severe COVID in the days after treatment, because nursing someone who is both radioactive and highly contagious would be extremely challenging.

If you are vaccinated and/or at low risk of severe COVID, then there is no requirement to self-isolate before radioactive treatment. However, it is very important that you inform us immediately if you have any symptoms that could be related to COVID, for example a new cough, shortness of breath, headache, temperature, sore throat, loss of taste or loss of smell. You will also be asked about these symptoms on the day of admission to the hospital.

If you are not vaccinated **and** are at high risk of severe COVID, should you contract the infection, we will ask that **you should formally self-isolate for two weeks prior to the treatment and 7 days following the treatment; other individuals in your household should also self-isolate for this period**. This is to ensure that you or other people in your household do not come into contact with coronavirus in the run-up to treatment. As above, you must inform us immediately if you have any symptoms that could be related to COVID and you will be asked about these symptoms on the day of admission to hospital.

This guidance is based on the *Medical and Dental guidance notes* and information published in *Brit J Radiol 72 (1999) 121-125* and *Eur J Nucl Med 26 (1999) 686-692* and is in line with the guidelines of the Royal College of Physicians on *Radioiodine in the management of benign thyroid disease 2007.*

**Precautions to be taken following radioiodine treatment (400MBq)**

***Pregnancy***

You **must not** become pregnant for at least **6 months** following radioiodine treatment. (There are no effects on children conceived after this period and the treatment does not affect your fertility).

***Fathering a child***

You **must not** father a child for at least **4 months** after radioiodine treatment. (The treatment does not affect your fertility).

***Breastfeeding***

If you are breast-feeding, you should stop at least **6 weeks** and preferably **8 weeks** before you have the radioactive iodine treatment.You must not breastfeed for at least **6 months** following radioiodine treatment. If you wish to do so, you must inform your consultant and radioiodine treatment will not be given until after you stop breastfeeding.

***Restrictions on contact with people with whom you have prolonged regular contact (e.g. people in your household)***

For the first **11 days** post treatment

* You must avoid **all** close contact with children aged five years and younger and pregnant women
* Close contact (less than one arm’s length) with children older than five years and any other adults who live with you must be **limited to less than 15 minutes in total per day**
* You must sleep alone, have no sexual contact and avoid kissing
* During this time it is preferable for children aged five years and younger to be cared for in a separate house

After that

* Close contact (less than one arm’s length) with children aged two years and younger and with pregnant women must be **limited to less than 15 minutes in total per day** for the next **10 days** (a total of 21 days after treatment).
* Close contact (less than one arm’s length) with children aged between three and five years must **be limited to less than 15 minutes in total per day** for the next **5 days** (a total of 16 days after treatment)
* There are no further restrictions on contact with children aged six years and older and other adults.

***Other people***

There are no problems with casual contact with other people (e.g. people in shops etc.) but you must avoid any contact with pregnant women or children under 5 for at least 11 days following your treatment.

Contact with pregnant women and children under 5 must then be limited to a maximum of 15 minutes per day until 21 days after your treatment.

***Return to work (outside the house)***

You should stay off work for a minimum of 2 days following your treatment; however the exact length of time required will depend on the nature of your work and whether your work takes you into close contact with other people (particularly children). Hospital staff will discuss the required length of time off work with your prior to your treatment.

***Hygiene***

Most radioiodine leaves your body in your sweat and urine during the first few days after treatment. You should drink plenty of fluids and go to the toilet a lot to speed this process up. Good hygiene is enough to prevent transfer of radioiodine to others but particular care should be taken:

For the first **11 days**

* Men should urinate sitting on the toilet to avoid contaminating the toilet
* After going to the toilet you should flush it twice
* Make sure that no-one else uses your towels and face cloths
* Hand-wash all your crockery and cutlery thoroughly using separate water
* Launder your personal clothes, linen and towels separately.

For further advice or information regarding these precautions, phone Medical Physics at the Western General Hospital on 0131 537 2155.