



## Kent Oncology Centre



# Radiotherapy for Thyroid Cancer: Side Effects and Management

We hope this leaflet will help you understand radiotherapy treatment to the thyroid; the side effects that may occur and ways to manage these effects. If you would like to speak to one of the radiotherapy team please feel free to contact them on the numbers given below:

### **Maidstone Hospital**

Macmillan Head & Neck Radiographer  01622 225094  
Appointment enquiries  01622 225080

### **Kent & Canterbury Hospital**

Macmillan Radiotherapy Specialists  01227 766877  
ext. 722 2711  
Appointment enquiries  01227 783010

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## What is radiotherapy?

Radiotherapy uses high energy x-rays and similar rays called electrons, to treat abnormal cells such as cancer cells. It is usually given as a series of short, daily treatments, Monday to Friday, in the radiotherapy department using a machine called a linear accelerator, also known as a 'Lin Acc'. The machine does not touch the body but you will be brought closer to it. You do not go 'into the machine' but it will move around you whilst you lie on the couch.

Treatment is individually planned for each person so even people with the same type of cancer may have different types of radiotherapy treatment.

Each treatment is called a 'fraction'. Giving the treatment in fractions ensures that normal cells are damaged less than cancer cells. The damage to normal cells is mainly temporary, but still causes radiotherapy side effects.

Radiotherapy **does not** make you radioactive so it is safe for you to be with people, including children, after each treatment. Radiotherapy is painless, although it may gradually cause some uncomfortable side effects which will be discussed later in this leaflet.

## How will I feel after treatment?

Radiotherapy affects people differently; some find that they can carry on working, only needing time off for their treatment, while others find it too tiring and prefer to stay at home. If you have a family to look after you may find you need extra help.

Don't be afraid to ask for help, whether it's from your employer, family and friends, social services, or the staff in the radiotherapy department. As your treatment progresses, you'll have a better idea of how it makes you feel, so you can make any necessary changes to your daily life.

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## Giving your consent

Before you have radiotherapy your doctor will explain the aims of the treatment to you. You will be asked to sign a form saying that you give your permission (consent) for the hospital staff to give you the treatment; no medical treatment can be given without your consent. Before you're asked to sign the form you should have been given full information about:

- the type and extent of the treatment you are advised to have
- the advantages and disadvantages of the treatment
- any other treatments that may be available
- any significant risks or side effects of the treatment

If there is anything you don't understand let the staff know straight away so that they can explain. Some cancer treatments are complex, so it's not unusual for people to need repeated explanations. You do not have to make a decision when the treatment is first explained, you can always ask for more time to think it through.

Before you have your first treatment, staff will check again that you still give consent to have treatment and will ask whether you have any further questions. You are free to choose **not** to have the treatment, and the staff will explain what may happen as a result of that.

### **Pregnant?**

Please tell the medical staff if you might be pregnant as radiotherapy can harm the developing baby.

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## Planning your treatment

Careful planning ensures that the radiotherapy is as effective as possible and that the radiotherapy rays are aimed precisely at the cancer, causing the least possible damage to the surrounding healthy tissues.

The treatment is planned by your clinical oncologist, a physicist and therapy radiographers. It is usually necessary to wait a number of days, possibly up to two weeks, for treatment to start because of the preparation required.

## Treatment mask

You are likely to need a special device called a mask to help you hold your position very still during your treatment, making it as effective as possible. This will be made on your first visit. The mask is made of plastic mesh which has been softened in warm water and molded to your head and face. It hardens after a few minutes and is then ready to use. It will fit snugly so it may feel claustrophobic, but you will only wear the mask for a few minutes at a time. Please do not wear any hair products, e.g. hairspray, gel or wax on the day of planning as these can make hair stick to the mask during moulding.

## CT planning scan

Once your mask has been made, you will then have a CT planning scan. A CT scan is a type of x-ray. You will be lying on a couch which will move through a wide ring so that many images from different angles can build up a three-dimensional picture of the area. The mask you are wearing will be fastened to the couch you are lying on. This session usually takes about 45-60 minutes.

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In order to obtain very clear images, it may be necessary to inject a dye (contrast) into a vein. The radiographers will discuss this with you and ask for your consent. A cannula will be placed into your arm so that the dye can be given when you are in the scanner. This is for the planning scan only and not for treatment. We advise that you do not have anything to eat for two hours before this scan but we like you to have had plenty to drink.

## **Positioning**

The CT couch will be identical to the one that you will lie on during treatment. The radiographers will explain what they are doing and will make you as comfortable as possible before leaving the room to take the scan which lasts a few minutes and is painless. They will watch you from outside the room. We need you to lie very still for a few minutes so that accurate measurements can be taken and your exact position recorded. Guidance marks can be made on the mask instead of on your skin. The measurements and the information from the scans are fed into a planning computer that is used to help your consultant plan your treatment precisely.

## **Having your treatment**

Before your first treatment the radiographers will explain to you what you will see and hear. It's quite normal to feel anxious about having your treatment, but as you get to know the staff and understand what is going on it should become easier.

The radiographers will advise you where to lie on the couch, gently fitting your mask on you before raising the couch to a higher position. Your positioning is very important so the radiographers may take a little while to get you ready (they may call this 'setting up'). The room may be in semi-darkness while this is happening and the radiographers will be talking to each other and calling out measurements.

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As soon as you are positioned correctly the staff will need to leave the room to prevent them from being exposed to any unnecessary radiation.

During treatment you will be alone for a few minutes but there will be a radiographer watching you during this time on a monitor camera. To protect your privacy, nobody else will be able to see you. If you have any problems you can raise your hand to attract the radiographer's attention and they will come in to help you. The radiographers may come into the treatment room to re-position equipment in the middle of your treatment.

Most radiotherapy machines can rotate around your body, giving treatment from several different directions. This and the sound of the machine can be unsettling at first. Some treatment rooms have CD players so that you can listen to music to help you relax while having your treatment and there may be a screen you can see which will display pictures.

The radiographers may tell you on some days that they are 'taking pictures'. Over the course of treatment you may lose a little weight and this regular check ensures that the treatment still matches the original plan. Occasionally small changes sometimes have to be made to your treatment plan; the radiographers will explain any changes, and their reasons, to you.

### **Side effects of external radiotherapy to the thyroid**

Some side effects may occur, usually towards the end of the course of treatment and also during the first few weeks after treatment has finished. Treatments given over several weeks give more side effects than a short course of treatment.

These side effects can be upsetting and may require you to make some adjustments to your normal life, but most are temporary and will gradually disappear after a few weeks. However, some side effects may continue for, and some may only become apparent after, months or years following treatment.

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## Short term side effects

You will be monitored throughout your treatment by the radiotherapy team. Please let them know if you experience any of the following problems:

### **Tiredness**

Radiotherapy can make you tired so you may need more rest than usual, especially if you have to travel a long way for treatment every day. It is good to try to get some exercise each day, however gentle.

### **Loss of appetite**

Some people lose their appetite as an effect of radiotherapy. A sore, dry mouth can also make eating difficult. You may also feel sick (nauseous) largely due to the thick, sticky saliva; drinking more fluids can help but do tell the radiotherapy team as medications can help to ease this.

It is often better to eat little and often and it is important to drink plenty of fluids, e.g. water, tea, coffee, squash, fruit juice, milk and soup. If you struggle to eat much, it is a good idea to supplement or replace your meals with nutritious high-calorie drinks which can be supplied initially by our dietitian and are subsequently available on prescription.

### **Sore throat**

Your throat will probably become sore and inflamed after a couple of weeks of treatment. Your voice may also become hoarse. Swallowing food may become painful. Please tell your radiotherapy team if this happens as medications can be used to ease this. You will be advised to eat soft food and to avoid smoking, drinking spirits and eating hot or spicy foods. Drinking plenty of bland, cool fluids e.g. milk or water will help to keep your mouth moist. Speech and language therapists and dietitians are available to discuss any problems with you if they arise.

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## **Dry mouth**

You may not produce as much saliva as before treatment. The lining of your mouth and throat may become dry, making eating and speech difficult. You may notice a feeling of sticky mucous in the throat, as radiotherapy can make the saliva thick and stringy. To reduce the dry feeling, it may be helpful to use an artificial saliva spray which we can supply for you.

Although you may start to produce some saliva again within a few months of treatment, it is important to be aware that the problem might continue for some time or even permanently.

We can give you advice about coping with the long term effects of a dry mouth.

## **Skin changes**

The skin over your neck may redden and become itchy and sore. Your skin reaction can be affected by the dose and type of treatment that your consultant has prescribed. It can also be dependent on your type of skin, your shape, any existing conditions such as diabetes and especially if you smoke.

Tips for helping your skin include:

- Wash the skin gently using soap or aqueous cream and gently pat dry
  - To reduce irritation to the treatment area you may use a moisturiser (your Macmillan radiographer can advise on this)
  - Wear loose fitting natural fibre clothing next to the skin
  - Men wishing to shave their face are advised to only use an electric razor or not to shave at all whilst on treatment as wet shaving can further irritate the skin
  - Avoid adhesive tape
  - Avoid heating and cooling pads/ice
  - Avoid hair removal products
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- Ensure the treated skin is covered when out in the sun. Your skin may be more sensitive to the sun especially in your first year after treatment and it is advisable to apply a high factor sun screen.

After finishing treatment you may be aware of your skin reaction becoming worse for up to another two weeks. Continue with the suggested skin care tips, returning gradually to your usual skin care regime when your skin has returned to normal.

### **Still smoking?**

Smoking during treatment could reduce the success of your treatment and cause some side effects to be worse.

Please ask for help if this is a problem for you.

### **Long term side effects**

- Hardening of the underlying tissue in the treatment area (fibrosis)
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**Further information and advice can be obtained from:**

**Kent Oncology Macmillan Cancer Information Centre,  
Maidstone Hospital**

Offers support and information to anyone who has concerns about cancer (patients, relatives, friends or carers).

☎ 01622 227064

**Macmillan Cancer Support**

Provide practical, medical and financial information

☎ 0808 808 0000 (Freephone)

Website: [www.macmillan.org.uk](http://www.macmillan.org.uk)

**NHS 111**

**NHS Choices online**

☎ 111

[www.nhs.uk](http://www.nhs.uk)

**Patient Experience Teams (PALS) for East Kent patients**

**Kent and Canterbury Hospital**

Desk at the outpatient's entrance of the hospital

**Queen Elizabeth the Queen Mother Hospital**

Office at the main entrance of the hospital (Ramsgate Road)

**William Harvey Hospital**

Desk at the main entrance of the hospital

☎ 01227 783145 or 01227 864314

Email: [ekh-tr.patientexperienceteam@nhs.net](mailto:ekh-tr.patientexperienceteam@nhs.net)

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Please use this space for your notes.

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\*The information in this leaflet has been taken from information provided by Cancer Research UK and Macmillan Cancer Support.

**MTW NHS Trust is committed to making its patient information accessible in a range of languages and formats. If you need this leaflet in another language or format please ask one of your clinical care team or the Patient Advice and Liaison Service (PALS). We will do our best to arrange this.**

Maidstone and Tunbridge Wells NHS Trust welcomes all forms of feedback from our service users. If the standard of service you have received from the Trust does not meet your expectations, we want to hear from you. Please speak with the ward manager or the nurse in charge in the first instance, or you can contact the **Patient Advice and Liaison Service (PALS)** on:

**Telephone:** ☎ 01622 224960 or ☎ 01892 632953

**Email:** [mtw-tr.palsoffice@nhs.net](mailto:mtw-tr.palsoffice@nhs.net)

**or visit their office** at either Maidstone or Tunbridge Wells Hospital between 9.00am and 5.00pm, Monday to Friday.

You can be confident that your care will not be affected by highlighting any areas of concern or making a complaint. The Trust will retain a record of your contact, which is held separately to any medical records. If you are acting on behalf of a patient, we may need to obtain the patient's consent in order to protect patient confidentiality. More information on PALS or making a complaint can be found on the Trust's website: [www.mtw.nhs.uk](http://www.mtw.nhs.uk) or pick up a leaflet from main reception.

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