

# Radiotherapy

## to the head and neck area

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### Information for Haematology Patients

You are to begin a course of radiotherapy in the Edinburgh Cancer Centre at the Western General Hospital. Most patients will require either 12 or 15 treatments of radiotherapy. These are called fractions. Do not be concerned if you need less or more than this. Each patient is individual and your oncologist (doctor) will talk about the radiotherapy dose with you.

You will have one treatment fraction each day, Monday to Friday. There is no treatment at weekends. Although you have a treatment slot of 10 minutes, treatment itself only takes 2-3 minutes.

This leaflet gives you information about your radiotherapy. Your oncologist will have spoken to you about most of this. If you have concerns, please speak to one of the team (i.e. the doctor, the clinical nurse specialist or the radiographer on your treatment machine) before starting your radiotherapy.

#### Before starting treatment

##### Stop smoking

Smoking during treatment will make the side-effects of treatment worse and will delay the healing process. We advise that you stop smoking before your treatment starts. Please ask if you need help and support with giving up.

##### Reduce alcohol intake

During treatment you should reduce your intake of alcohol as this can irritate the lining of your mouth or throat. Please ask if you need help and support with this. If you do wish to drink, beer will be less irritating than wine or spirits.

##### Dentist

If you have any problems with your teeth or your dentures, you must see a dentist before starting your treatment. This is because radiotherapy will slow down the healing process. Avoid having any dental work during treatment and for three months after you finish treatment.

##### Radiotherapy treatment planning

Before you start your radiotherapy we need to plan it carefully. This involves a visit to the Edinburgh Cancer Centre a few weeks before your radiotherapy starts. We will send you a letter with an appointment date and time for your treatment planning. For all appointments please report to the reception desk in The Edinburgh Cancer Centre.

##### Mould Room

Most patients having radiotherapy to the head and neck region will need to wear a mask during treatment.

Your first visit will be to the mould room where our mould room technicians will make your mask. The mask is sometimes called a beam direction shell.

The technician will explain the whole procedure to you before they begin. It takes about 20 minutes and is painless. Some patients who are claustrophobic may find this appointment difficult. Please speak to the team if you are worried about anything. The technician will place a warm sheet of plastic over your face and neck and smooth it out so that it fits your shape exactly. This mask helps you stay in exactly the correct position for your treatment – you will wear this mask during your treatment for up to 10 minutes each day.

### **CT scanning (used to plan treatment)**

Your treatment planning will continue the same day with a visit to the CT scanner. This takes approximately 30 minutes and you will need to wear the mask during this scan. The machine looks like a normal CT scanner but it has important computer software to allow specialised radiotherapy planning to take place. You may need to have an injection of contrast dye into your vein during this time. This injection helps the radiographers see your body on the scan better and this helps with the technical aspects of planning. The radiographers at the CT scanner will explain this to you.

## **During treatment**

### **Radiotherapy**

Please report each day directly to the radiotherapy reception desk. Your radiotherapy treatment is quicker than your treatment planning. The treatment machine is a large x-ray machine called a 'linear accelerator.'

The radiographers will explain what they are doing. They will first carefully position you on the bed and fit your mask while positioning the treatment machine to the correct treatment areas. Although the radiographers will be with you during positioning for treatment, they must leave the room whilst the radiotherapy is given. They will be watching you the whole time on the TV screen outside. You will not feel anything during the treatment, which will last about 2 to 3 minutes.

**If you have any questions or worries about your treatment, please do not hesitate to ask.**

During the course of your treatment you will be seen routinely once a week by one of the treatment review nurses or doctors in your team. This is to see how the treatment is working and will give you the opportunity to discuss any problems or questions that may arise. However if you experience any problems at any time, the radiographers will be happy to help.

### **Side-effects of radiotherapy**

Radiotherapy only affects the area that is being treated. The side-effects happen because of damage to cells in the treatment area. At first you should not notice any difference. Once your radiotherapy has begun, you will begin to

notice the side-effects, usually at the beginning of the 3<sup>rd</sup> week. These side-effects will gradually get worse until the end of the treatment and can continue for some weeks afterwards until you slowly start to heal and feel better. As radiotherapy affects people in different ways, it is difficult to predict exactly how you will react to your treatment. Your doctor, nurse or radiographer will explain the side-effects you may experience before your treatment begins.

### **Early side-effects: (which you might experience during radiotherapy and for up to 6 weeks afterwards)**

#### **Tiredness**

You may feel tired during your treatment and it is possible that this tiredness can last for months after your treatment has ended. It is important to rest if and when you need to.

#### **Skin reactions**

The skin in the treatment area receives a dose of radiotherapy. It may become pink and by the end of treatment can be hot and itchy (similar to sunburn). This usually settles a few weeks after your treatment has finished. To minimise these symptoms:

Wash the area very gently with lukewarm water and a very mild soap such as Baby or Simple soap and pat dry gently with a soft towel

- Men must use an electric shaver
- Wear loose fitting cotton clothes, which do not rub the skin
- We will give you a moisturising cream (Diprobase) to use during and after treatment.
- Do not use any other creams during your radiotherapy.
- Avoid using perfume, aftershave, and cosmetics in the area being treated with radiotherapy. Also avoid exposing these areas to strong sunlight. In the future, you should wear high factor (at least factor 25) sun cream on these areas as they will be more sensitive to the sun and UV rays.

We will give you a separate leaflet with more information on how to care for your skin.

#### **Painful mouth/throat**

The cells lining the mouth and throat are sensitive to radiation and you may feel sore about 2 weeks after starting radiotherapy. You will be prescribed mild painkillers, usually soluble paracetamol, to help but you may need strong painkillers by the end of the treatment. If your throat is sore, we may prescribe you Oxetacaine (a local anaesthetic) and antacid (a white liquid) to swallow, which has a pain relieving effect. Take these 20 minutes before a meal.

Many painkillers can cause constipation and you may need to have some laxatives as well. Please let your radiographer, nurse or doctor know if you are sore so that we can prescribe you some painkillers.

## How to care for your mouth

- Brush your teeth very gently 4 times a day (after meals and at night). Use a soft toothbrush and fluoride toothpaste
- If you have dentures, remove them at night and soak
- Mouthwash: Do not use commercial mouthwashes.
- Please use the following as a mouthwash:
  - Add exactly 1 level teaspoon of sodium bicarbonate (baking soda) to 1 pint of water, cover and keep in the fridge. Rinse your mouth and gargle at least 4 times a day after meals. Do not swallow. **Do not use more than level 1 teaspoon to 1 pint of water** (as this can burn the lining of the mouth)

## Dry mouth

You may find your mouth becomes dry during your treatment. Drink plenty of fluids and carry a small bottle of water with you when you are away from home. Sugar-free chewing gum may also help. Please ask your doctor or nurse for advice on this. Some people may experience a dry mouth permanently as an effect of radiotherapy and we can discuss this with you.

## Eating, drinking and swallowing

You may experience some difficulty during and after radiotherapy treatment with eating, drinking and swallowing. This may be due to pain, changes to taste or reduced appetite. You may need to avoid dry foods such as bread, and have to eat a softer diet.

## Voice changes

If your throat is being treated, you may notice that your voice becomes hoarse during treatment but usually returns to normal following treatment.

## Hair loss

Radiotherapy enters and exits through the skin and you may lose some hair in these areas, e.g. on the face or side of the head. This is usually temporary.

## Late side-effects: (which you might experience several months to many years after your radiotherapy)

### Dry mouth

Your treatment may affect your salivary glands, so they produce less or even no saliva during treatment. If this happens, it may take months for saliva production to get back to normal. Sometimes this causes a permanently dry mouth afterwards.

### Poor dentition

If you experience dryness in the mouth, this can make you more at risk of problems with your teeth. Good dental care is important and you should see your dentist every six months. Tell them you have had radiotherapy and /or chemotherapy. Carrying a small bottle of water with you to sip may help your symptoms. Sweets to suck on or sugar-free chewing gum may be helpful.

### **Poor hair growth**

If you lose hair during treatment, this usually grows back but it may not be quite as thick as before and sometimes can be quite patchy. It can grow back in a different colour or curly when it used to be straight. Men may have a permanent loss of beard in the treated area.

### **Cataracts**

If your eyes are near the area being treated, the lenses in your eyes can be affected. This may result in cataracts developing later in life. This is when your lens becomes misty or fogged. You may need to see an optician regularly who can refer you to an eye specialist who will discuss having an operation to replace the lens in your eye/s.

### **Hypothyroidism**

Your thyroid gland sits in your neck and may produce less thyroid hormone if it is in the area being treated with radiotherapy. This is known as hypothyroidism. It can cause a number of symptoms such as tiredness, weight gain, sensitivity to cold, low mood and skin and hair changes. Your GP can carry out a simple yearly blood test to check for this and treat it easily with thyroid hormone tablets.

### **Risk of stroke**

When the radiotherapy area includes the side of the neck, there is a small risk that 20 years later the blood vessels deeper in the neck have been narrowed by the radiotherapy. This increases the risk of a stroke.

### **Secondary cancers**

There is a very, very small risk of developing a secondary cancer in the area being treated with radiotherapy later in life. These cancers are not related to the original cancer but to the radiotherapy itself. If a second cancer were to occur, it is usually many years after the course of radiotherapy. This risk needs to be balanced against the intended benefit of radiotherapy treatment. Please discuss this with your doctor if you have any concerns.

## **After treatment**

### **What happens when the treatment is finished?**

Following completion of your radiotherapy, the side-effects continue for a few weeks before beginning to settle. Everyone is different so it is difficult to say exactly how long this will be. You will be seen approximately 6-8 weeks after treatment to ensure that the early side-effects of treatment have settled. You will also have ongoing follow up with your haematologist. Some patients require further scans to ensure that your treatment has been successful which are usually done about three months after the end of your radiotherapy.