

# Radiotherapy for cancer of the head and neck area

## Introduction

The Gloucestershire Oncology Centre at Cheltenham General Hospital is a specialist centre for the treatment of cancer and patients come here from Gloucestershire, Herefordshire, Worcestershire and Wales.

This booklet has been specially written for patients receiving radiotherapy for cancer of the head and neck area of the body. By giving you some idea of what to expect, we hope to ease some of the worries you may have.

This booklet is intended as a guide as effects of treatment may vary from one person to another. If you have any worries, however small, during or after treatment, please speak to your doctor, radiographer or specialist nurse, either at your visit or by telephoning the department.

When you arrive at the oncology department, it is important that you check in to radiotherapy reception so that we know you are here. Please sit down and a radiographer or support worker will call you through for marking-up or treatment.

We have male and female staff working in our department and we also train students who are always supervised.

## What is radiotherapy?

The machine used to give you your radiotherapy treatment is called a linear accelerator (Linac).

Radiotherapy is the use of carefully measured doses of radiation to treat disease, usually cancer.

The benefits of radiotherapy mean that many cancers can be cured. However, this is not always possible, but radiotherapy also plays an important part in controlling symptoms and increasing the quality of life of people with cancer.

The alternatives to having radiotherapy will be discussed with you by your consultant. Not having treatment may mean that your disease progresses.

Reference No.

**GHP1198\_09\_15**

Department

**Radiotherapy**

Review due

**September 2018**

## Patient Information

Specially trained therapeutic radiographers will plan and give you your treatment.

Radiotherapy may be used as a treatment on its own or with other treatments such as chemotherapy and surgery. We treat the area where the cancer is, or has been removed from.

Our bodies are made up of many cells – these cells divide. Radiotherapy works by damaging cells when they are dividing. Cancer cells divide more rapidly than normal cells so are more sensitive to the damage caused by treatment and recover less easily. **You will not be radioactive.**

### Important information for women

If there is a possibility that you might be pregnant, please inform your doctor or radiographer when you arrive as there may be a risk to your unborn child. It is also important to avoid becoming pregnant during your course of treatment.

### Appointments

Many patients receive their treatment as an outpatient and travel to the department for their appointment. Most patients arrange their own transport, either driving themselves or being driven by a friend or relative. Please ask at reception about a parking permit.

In some cases, we may be able to arrange hospital transport for you, but we need to know in advance. If this applies to you, this will affect your appointment times.

For cancer of the head and neck, you may receive between four and seven weeks of treatments. This will be Monday through to Friday, and may include two treatments on one of those days. If a bank holiday falls during your treatment, we may need to treat you on a Saturday to compensate for this.

On a day when two treatments are given, there will be a six hour gap between them. For patients who live locally you may go home between appointments. For patients who live further away we can arrange access to a room for you to use during the day; either a hostel room, if one is free or the day room on our ward.

If you are using nutritional supplements, please bring a supply with you and also any medications you will need.

**Patient  
Information**

You may also like to use this time to visit the nearby Maggie's Cancer Caring Centre; contact information for the centre is at the end of this leaflet.

**Once you have started treatment it is very important that you do not miss any.**

## **Planning your radiotherapy treatment**

Before beginning radiotherapy, the treatment needs to be carefully planned. Some patients need a mask to be made before the treatment commences. The mask helps you to keep still in the position required and allows marks needed for the treatment to be drawn on the mask rather than on your skin.

The mask will be made at a Computed Tomography (CT) planning appointment and is worn for all treatment and planning appointments. Specialist Radiographers carry out all the planning and treatment appointments. A doctor may not be available at any of these appointments unless you have urgent issues to discuss.

## **Making a mask**



The radiographers will explain in detail what is involved in making your mask when you arrive for your appointment.

You will be asked to remove any clothing from around your neck and shoulders; this is to ensure the mask fits well and to prevent your clothes becoming wet.

**Patient  
Information**

The mask is made from a sheet of plastic mesh. This is immersed in warm water and then becomes soft. Once it is softened the radiographers will shake off the excess water and gently place it over your face and neck.

You will feel them gently moulding it to the shape of your face and neck. It is very important that you remain still whilst this is happening; some people find it a strange experience but it doesn't hurt and you can breathe whilst wearing the mask.

The mask will take about ten minutes to dry and set, during which we will stay in the room with you. If we need to leave the room we will let you know.

The next step is to mark up your mask ready for treatment. This may be done via a CT scan.

**CT planning**

Despite probably having had previous CT scans, we need to do a scan with you lying in the position required for your treatment and with you wearing your mask. This scan is used specifically for the planning of your radiotherapy treatment.

The radiographers will position you on the CT couch with you wearing your mask. The mask is attached to the couch top so if you need the mask to be taken off please raise your hand so the radiographers can remove the mask safely. It may be necessary to have an injection of contrast to help show up the area we're looking at.

The radiographers realise that wearing the mask can be difficult for some people and will be as quick as possible.

**Patient  
Information**

They will draw some marks on the mask and as soon as the scan has finished the mask is removed. This process may take up to ten minutes.

Before leaving, the radiographers will give you all your treatment appointments. All of these appointments are in the oncology department. It is important to bear in mind that occasionally it is necessary to make adjustments to your treatment plan. This may mean that your appointments could be changed.

## What happens during treatment?

### Your first treatment



Before your first treatment, a radiographer will explain your treatment and its side effects to you and answer any questions you may have. You may have a relative or friend with you.

It may be necessary to remove or move some items of your clothing from around your neck or shoulders so the mask fits correctly.

The radiographers will cover your body up whenever possible to make sure your dignity is maintained.

You will lie on the treatment couch and your mask will be placed on you. The radiographers will then position the treatment couch and treatment machine. You will feel the couch moving as the radiographers' line up the marks drawn on the shell/mask with the treatment machine.

## Patient Information

The radiographers will leave the room to switch the treatment on but a closed circuit television on the control desk means they can see you at all times during your treatment.

It is important for you to stay still during your treatment but the radiographers will tell you what to do if you need to cough, sneeze or move during your session. There is no need to hold your breath; you should breathe normally.

The radiographers will enter the room to move the machine to the correct position for the next part of your treatment, they will tell you when your treatment has finished and you can get off the couch.

The whole procedure will last 10 to 20 minutes and there is nothing to see or feel; you will hear a buzzing sound when the machine is on.

In the first week and regularly afterwards the radiographers will take X-ray pictures before your treatment to check your positioning. When this happens you may notice that you are in the room for a little longer.

This is to allow the Radiographers to check all the images before they treat you. You may also notice the bed move slightly when we make our adjustments. This is to ensure the ongoing accuracy of your treatment.

Each treatment is very similar so once you have your first treatment you will know what to expect every day.

**Please ask the radiographers if you have any questions or concerns.**

## Phased treatment

For some patients, it is necessary to make changes to their treatment after they have started. This may be because we can make the treatment area smaller as time goes on. Or it may be because we need to make a new mask for you.

This may mean you need to have further planning appointments during your course of treatment. This can also alter the length of time your treatment takes at each visit, either making it shorter or longer. Your radiographers will explain this to you if it happens.

**Patient  
Information**

## Chemotherapy

Many head and neck patients will also have chemotherapy before, after, or alongside their radiotherapy treatment.

The chemotherapy given may require fluid before and after and so usually requires staying in hospital for one or two nights.

The chemotherapy is timed very carefully to coincide with your radiotherapy and you are usually asked to come in on a Sunday night and then receive both chemotherapy and radiotherapy the next day. This occurs two to three times during your radiotherapy.

Even if your chemotherapy is delayed or not given, it is very important that you still receive your radiotherapy treatment as planned, especially on the first day that your treatment is due to start.

You will also be seen in the chemotherapy clinic the week before your chemotherapy.

## Side effects of radiotherapy

Each patient is an individual and may experience some or all of the side effects to differing degrees. Specific side effects will depend on exactly which area of the head and neck is receiving treatment. Your radiographer will explain which side effects apply to your treatment.

We appreciate that this treatment can be very difficult and there is a specialist team looking after you: you will be seen at intervals in the review clinic to assess and manage your side effects and give you a further opportunity to ask questions and discuss any concerns you may have. This will be with a specially trained radiographer. You will also be seen weekly by the Head and Neck team (specialist nurse, dietitian and speech and language therapist). If you need to see a doctor during your treatment, your radiographers will arrange this.

## General advice for side effects

### Tiredness

Some patients may find that they feel more tired than usual during treatment (often after two to three weeks). Travelling to the department may also add to this.

**Patient  
Information**

You may find it helps to get plenty of rest and sleep during treatment (especially if you start to get tired). It is important that you continue with your normal activities and routines as much as possible.

Try to find a sensible balance between rest and activity. We have an information leaflet designed to help you cope with Fatigue. Please ask a nurse if you would like a copy of this leaflet.

**Skin**

Your skin in the treated area will become pink or red as your treatment progresses. It is likely that the skin in the treated area will get very sore and may peel or blister which will become painful and uncomfortable.

Please be reassured that the radiographers are able to help you with this and provide any advice, pain control, alternative creams, gels or dressings that may be needed.

As the skin becomes more sensitive, it may feel dry, sore or itchy. The radiographers will advise you on how to care for your skin.

You may bath or shower during treatment, but wash the treated area with lukewarm water. Do not use any perfumed products on the area.

We recommend that you do not wet shave within the treatment area but use an electric shaver to reduce friction.

You may wish to wear looser cotton clothing next to your skin to minimise irritation.

While having treatment and for the foreseeable future, your skin within the treatment area will become very sensitive to the sun. Please avoid sun exposure to the treatment area where possible.

You will find as treatment goes on, the hair will stop growing in the area being treated; this may or may not come back after the end of treatment.

Please discuss any side effects you experience with the team of radiographers treating you.

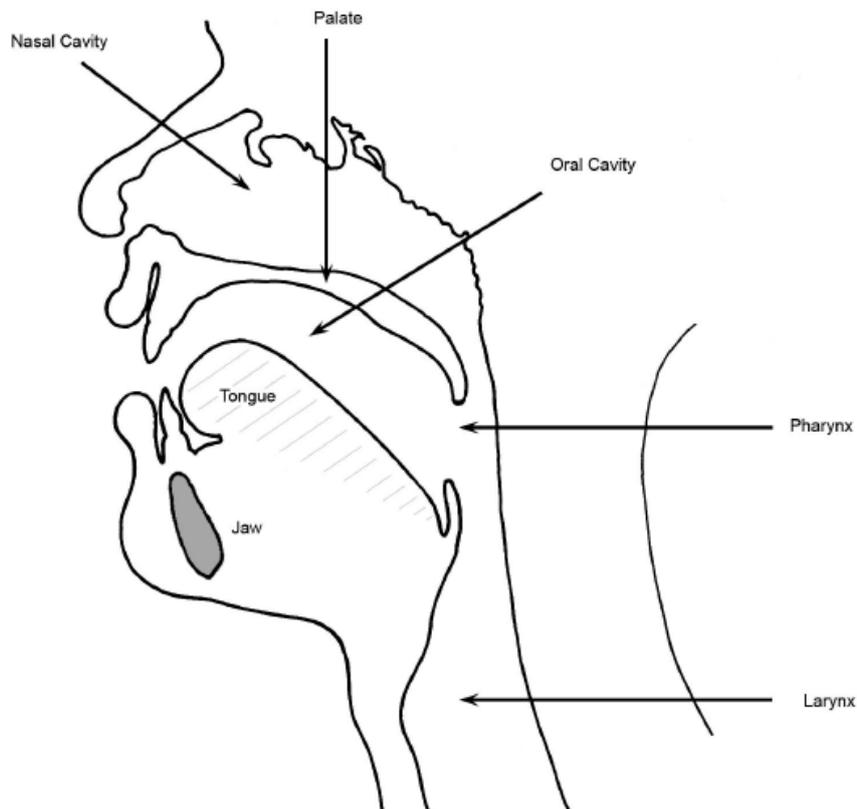
**Patient  
Information**

As well as the general side effects from this treatment, there will be particular side effects depending on the **area** of your head and neck we are treating with radiotherapy. **Please read the section that applies to your treatment.**

**Your radiotherapy treatment is to the:**

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**You will experience side effects to the following areas:**



## **Side effects of treatment to the nasal cavity (Nasopharynx)**

### **Dryness of the mouth and throat**

Your mouth may become increasingly dry throughout treatment. We will advise you to sip water regularly throughout the day and to suck sugar free sweets/chew sugar-free gum. We can also provide artificial saliva spray to help keep your mouth and throat moist.

**Patient  
Information**

This may be a permanent problem - most people gradually adjust to this by sipping water regularly.

**Loss of voice**

Your voice may change and lose some of its strength whilst having treatment. It can also become painful to speak.

**Taste changes**

Many patients suffer from changes in taste sometimes alongside a metallic taste. This may lead to you not enjoying certain foods as much as you usually do. We can advise you on how to manage this. Your taste should gradually return, but this can take 6 to 12 months after treatment. Occasionally, your taste never completely returns to normal.

**Loss of smell**

Your sense of smell will be affected and any loss or change may be permanent. Your nose may feel 'bunged up' and you may experience nose bleeds.

**Ear problems**

Hearing can change whilst on treatment; this includes loss of hearing (this can take a couple of months after treatment to resolve). Soreness, inflammation and swelling of the ear and in some cases weeping may occur; this will take a few weeks after treatment to calm down.

**Hair loss**

Depending on the radiotherapy treatment you are having, a small amount of hair (usually towards the back of the scalp) may be lost. If this is the case, the radiographers will show you the area. This is not generally permanent and grows back in time.

**Pituitary and Hypothalamus function**

The pituitary gland and hypothalamus are areas at the front of your brain which very occasionally can be affected by your radiotherapy treatment. This can affect certain hormone levels. Your doctor will arrange regular blood tests to check these levels if it is necessary.

**Patient  
Information****Side effects of treatment to the Throat  
(Larynx)****Loss of voice**

Your voice may change and lose some of its strength whilst having treatment. It can also become painful to speak.

**Swallowing**

You will find it difficult to swallow and the radiographers or doctors may provide you with pain medication to assist with this. We also have a specialist speech and language therapist who can advise and help you. It is very important that you try and swallow regularly even if it is just sips of fluids. Taking regular pain medication to allow you to continue swallowing is better than not taking the medication and therefore not swallowing.

**Tracheostomy**

If you have a tracheostomy tube fitted, you will be given a plastic one to wear instead of metal before your radiotherapy starts.

**Side effects of treatment including the mouth  
(Oropharynx and Oral Cavity)****Soreness inside the mouth**

The radiotherapy treatment will make your mouth very sore. This will happen gradually. This can be managed by pain medication and you will be monitored closely to ensure this is under control. The team looking after you will ensure you are advised on how to manage this.

**Infection (oral thrush)**

During treatment you will be at high risk of developing an oral infection. Your mouth will be regularly checked for this and you must inform a radiographer if you notice any changes.

**Dryness of the mouth (Xerostomia) and thick mucus**

Because of where your salivary glands are situated, your saliva will become thicker and stickier.

## Patient Information

This leads to a dry mouth and throat and can make eating, drinking, speaking and swallowing difficult. You may be offered an artificial saliva spray. During treatment, one of the most difficult side effects to deal with can be the production of thick mucus in the mouth and throat. We may offer you something called a nebuliser, which produces a fine mist to help manage the production of thick mucus. The thick mucus does go after a while, once treatment has stopped; even though the dry mouth may continue and be permanent.

### **Taste changes**

Many patients suffer from changes in taste, sometimes alongside a metallic taste. This may lead to you not enjoying certain foods as much as you usually do. We can advise you on how to manage this. Your taste should gradually return, but this can take 6 to 12 months after treatment. Occasionally, your taste never completely returns to normal.

### **Sore lips**

Your lips may become sore and dry and you may need cream to apply to them. Sipping water regularly will also help keep them moist.

### **Stiffness of the jaw (Trismus)**

Some patients who undergo this treatment suffer from scarring of the muscles and joints which support your jaw. To help prevent this, you must try to move your jaw and stretch the muscles on a regular basis. If you haven't already seen a speech and language therapist regarding exercises to help this, please ask.

**Finally, it is important to stress that the side effects mentioned are possible effects and that you may not experience all of them. Also, areas other than that where the cancer is situated may be affected by the treatment, for example if you are receiving treatment for cancer of the throat (larynx) you may experience side effects in your mouth. Your radiographer will tell you if this applies to you.**

**Patient  
Information****Oral hygiene**

It is vital to keep your teeth, mouth and gums as clean as possible. **We recommend you use salt water as a mouth wash (1tsp in 200ml water) every four hours. At the start of your treatment, we will give you toothpaste and a soft toothbrush to use after meals or every four hours. If you cannot tolerate salt water, use plain water. You should already have seen a dentist to assess your teeth. If not, please discuss this with the team looking after you. If you have been given other mouthwashes, please also discuss this with the head and neck and review team when they see you.**

If you wear dentures, they will need to **be thoroughly cleaned after every meal or every four hours, with a brush and water. Soak the dentures in Milton 1% solution and throw away the solution every day.**

**Clean around your mouth every four hours with salt water or plain water. If your mouth or gums begin to get sore you will be advised to leave your dentures out when possible.**

You may notice the shape of your gums change and you may require new dentures to be fitted at a later date.

**Eating**

During your treatment, you may find that you are having difficulty eating or with maintaining your weight. Our dietician will be able to advise you on maximising your nutritional intake. You may also be provided with some food supplements that are easier to swallow. Some general advice for your diet whilst you're on treatment:

- Try to keep drinking non-alcoholic fluids.
- Eat as well as you can; with higher calorie foods e.g. full fat milk/creamy yogurts.
- Sipping fluids often and eating small frequent meals may be easier than large meals if you have lost your appetite.
- Softer/moister foods may be easier to eat.

Some patients will already have a feeding tube placed before the start of radiotherapy. When the time comes to use this, your dietician will advise you and support you fully on how to use this tube and devise a nutritional feeding plan for you.

**Patient  
Information****Effects after radiotherapy:**

Your doctor will have discussed with you the possibility of potential long-term side effects occurring after your treatment has finished. The advantage of receiving radiotherapy is believed to outweigh the risks of longterm problems. The side effects can take a while to settle down after radiotherapy and in fact they may be worse for a few weeks after treatment finishes, as there is a build up of all the treatment.

Tiredness particularly can take a while to pass and this can take up to eighteen months. It is important to remember that the full benefits of the treatment can take a number of weeks to be felt. Most people find they notice a gradual improvement in how they feel in the days and weeks after treatment has finished.

Any skin reaction should begin to settle down within a few weeks of treatment finishing but may take a while to go completely, depending on how severe it is at the end of your treatment.

You may continue to experience difficulty swallowing for a while, sometimes up to 6 to 12 months after treatment stops; please carry on following any dietary advice you have been given, for example softer foods, supplements and fluids. You may need to continue with any pain killers you have been taking for a while. In some cases, swallowing may not recover completely after radiotherapy and there may be some long term problems with swallowing. If all your salivary glands have been treated with radiotherapy there is a risk of a permanently dry mouth. Most people find sipping water can help.

Although all patients are glad to have finished their course of radiotherapy, it is quite normal to feel anxious as to what happens next. Please don't feel abandoned, if you have any worries regarding your treatment or side effects you can phone the Radiographers who treated you. The department is open on weekdays; please try to call between 10:00am and 4:00pm. You can also contact your GP if you have any other worries concerning your disease or treatment. If you need urgent help out-of-hours contact your GP or go to an Emergency Department.

**Patient  
Information****After treatment has finished**

On the day of your last treatment, the radiographers will give you specific advice on what to do now your treatment has finished, how to manage any side effects and what to expect now.

You will also be given your first follow up appointment.

This will be with your Head and Neck specialist nurse about two weeks after treatment finishes. Your consultant will also see you four to six weeks after treatment finishes.

This time is given to allow the treatment to continue working and then side effects to begin to settle and for you to recover.

If you are having dressings for your skin or taking regular medication, your district nurse and GP will take over your care.

You can contact your specialist nurse will also be contactable if you have any queries or are in need of any support.

**Radiotherapy telephone numbers:**

Radiotherapy reception	0300 422 4147
Radiotherapy appointments	0300 422 4471
<b>YOUR TREATMENT MACHINE:</b> _____	
<b>TELEPHONE NUMBER:</b> _____	
<b>YOUR TREATMENT TEAM:</b> _____	
_____	

**Other Services**

**Cancer Information Centre:** Located in the main oncology waiting room is a fully staffed Cancer Information and Support Centre. It is open Monday to Friday 10:00am to 5:00pm. You can also phone them on Tel: 0300 422 4414. As well as information on treatments and support groups, the Centre advises on how to obtain wigs and can supply scarves and turbans to patients, as well as a list of companies who may be able to help with holiday insurance.

**Patient  
Information**

They also sell herbal sweets for nausea.

**Complementary therapies:** Aromatherapy, massage and reflexology are available to patients and carers. The charity 'Look Good. Feel Better' run monthly beauty sessions here for women undergoing treatment for cancer. Appointments can be booked through the information centre.

**Maggie's Cancer Caring Centre:** The local Maggie's Cancer Caring Centre is located close to Cheltenham General hospital and offers support services. See [www.maggiescentres.org](http://www.maggiescentres.org) for further information, or contact the centre on Tel: 01242 250 611 or pop in to see them.

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**Notes, Questions, Queries**