



The Clatterbridge
Cancer Centre
NHS Foundation Trust

Radiotherapy to the head or neck

Radiotherapy



A guide for patients and carers

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This information is for patients who are going to receive radiotherapy to their head or neck.

This leaflet will explain:

- What is radiotherapy?
- What to expect on your first visit
- Types of masks we make
- The planning stage
- The treatment stage
- General information about side effects of treatment
 - During and after treatment
 - Long term side effects
- Completion of radiotherapy and follow-up
- Who to contact when you need advice

You might find it helpful to read The Clatterbridge Cancer Centre 'Radiotherapy' booklet, which explains how radiotherapy works and what to expect when you attend the department.

What is radiotherapy?

Radiotherapy is a treatment that involves the use of high-energy radiation. It is commonly used to treat cancer. It can be used alone, with or without surgery, or in combination with chemotherapy. The appropriate treatment will be discussed with you by your doctor.

What to expect on your first visit

On your first visit, you will come to a department called the 'Mould Room' at Clatterbridge Cancer Centre - Wirral. This is where all immobilisation (equipment to help keep you still whilst on the treatment bed) is made for your treatment. A member of staff will explain the most appropriate type of mask that will be made for your specific treatment.

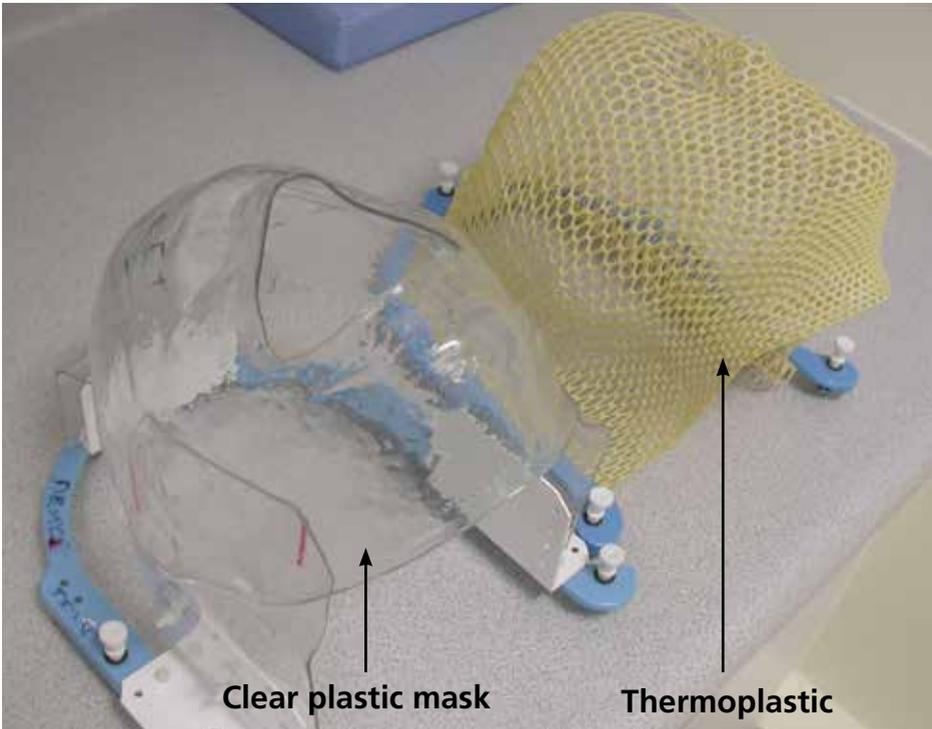
If you have any of your own teeth, you may be sent for a dental assessment before your radiotherapy treatment starts. An appointment will be made for this dental assessment with the dentist at Clatterbridge Cancer Centre - Wirral. We often try to organise your dental assessment on the same day as visiting the Mould Room. You may also have a dental assessment about seven-eight weeks after your radiotherapy treatment has finished, the Mould Room staff will inform you of this date, if required.

We will also record your height and weight, to help monitor any weight loss/gain throughout your treatment.



Types of masks we make

We make two different types of mask. A decision on which one will be suitable for your treatment will be made by your consultant and the mould room staff.



Clear plastic mask:

This mask is made by putting a small amount of Vaseline on your face and placing cling film over your hair and any areas of facial hair. The next stage is to apply wet plaster of Paris bandages (similar to those used to mend broken bones) onto your face and head

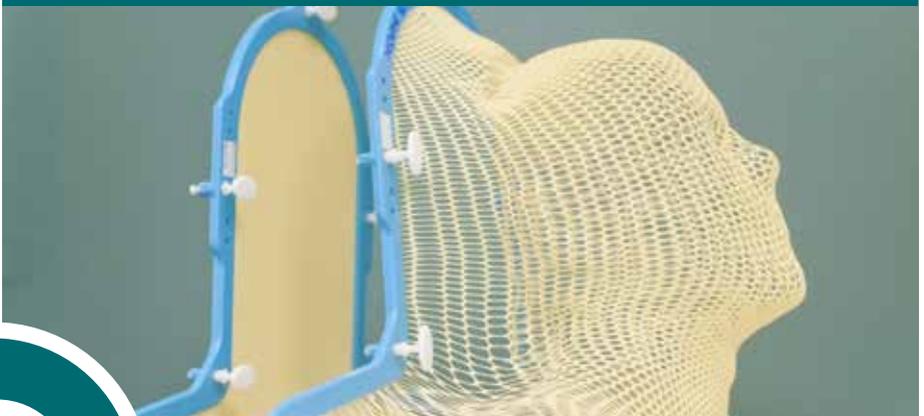
to get a perfect impression of you. Your nose and/or mouth will not be covered throughout this process. The bandages get warm as they dry (approximately 5 minutes). Once set, the mask will be removed and you will be free to leave, once cleaned up. The whole process takes approximately 20 minutes.

You will need to return a few days later to have the plastic mask, which has been made from the plaster of Paris impression, fitted ready for planning

Thermoplastic:

This mask starts as a flat sheet of plastic attached to a frame; it is placed in a hot water bath where it becomes soft and flexible. It is then placed over your face and neck and feels like a warm, wet flannel. We mould the plastic sheet to your shape, which can feel a little strange but is painless. The mask sets in approximately five minutes and is ready to use straight away. The mask is perforated therefore allowing normal breathing.

The picture below shows the thermoplastic mask before and after the moulding of the material to the patient's face.



The planning stage

As part of the planning for your radiotherapy treatment you will require a Computerised Tomography (CT) scan and possibly a Magnetic Resonance scan (MRI) or Positron Emission Tomography (PET CT) scan. The CT scan only takes a few minutes and provides us with a picture of your internal anatomy. If you require an MRI or PET CT scan, these take longer, approx. 20 minutes but full details, including time, will be discussed with you by the mould room staff. The scans will be performed with you lying down on the scanner bed with your mask on. To help us see the area that we need to treat, you may need an injection of contrast (dye). We will discuss this in more detail with you when you arrive for your planning appointment.

The treatment stage

Radiographers operate the radiotherapy machines to give you the precise treatment prescribed by your Oncologist. They will explain to you what is going to happen and take you into the treatment room. You will be asked to remove any clothing and jewellery that covers the head and neck area. You may be asked to remove your dentures, if necessary. The radiographers will help you on to the treatment bed, place your mask on you and will adjust both the bed and the machine to the exact positions that are required. You will be asked to keep as still as possible.

The radiotherapy machines are quite big and if you have never seen them before, you might feel anxious. There is no need to worry - you won't see or feel anything during treatment. Once

you have been positioned for your treatment, the radiographers will leave the room and operate the machine from outside the room. The treatment machine will rotate to different positions during your treatment, you will be required to lie still and breathe normally throughout. Each daily treatment session will take about 15 minutes in total. This includes time for you to change, for the radiographers to help position you for treatment and for the actual delivery of the treatment.



The picture above shows how you will be positioned in your mask ready for treatment.



During your treatment you will be alone in the room, but the radiographers will be watching you carefully on a closed circuit television system.

General information about the side effects of treatment

Side effects depend on the area you are having treated, the duration of your treatment and the total dose of your treatment. Every patient is different and you may not have the same side effects as somebody else. Your Oncologist will discuss with you in more detail the side effects you may experience, but some of the side effects are listed below.

You may notice the side effects after the first week of starting your treatment. However, most will start to appear within 14 days. Treatment courses vary in length and in some cases the side effects may not happen until after your treatment has finished.

Most side effects are temporary but some may last for weeks or months after your treatment has finished.

During your treatment, a radiographer or nurse will be able to answer any questions and deal with most of your problems. However, your Oncologist will also see you regularly throughout your treatment. It is important to let us know about your side effects.

Occasionally, it may be necessary to come into hospital to help you cope with your side effects during treatment.

Side effects during and after your treatment

Not all these side effects may be applicable to you. Your Oncologist will discuss these with you in more detail.

Your mouth and throat

- Treatment to your face or neck may cause soreness of your mouth and throat, your Oncologist can give you some medicine to help relieve the soreness
- Your voice may become hoarse
- The treatment may affect your salivary glands. Your saliva may become thick and sticky making your throat feel dry. This dryness can last for some months and may be temporary or permanent
- You may notice that your sense of taste changes. Usually, this will gradually return to normal after a few months
- Your lips and skin may become dry and sore. We can give you a cream to relieve the soreness

You can help yourself by:

- Eating small meals frequently – five or six times a day even if you are not hungry
- Eating soft moist foods, such as breakfast cereals, with plenty of milk, scrambled eggs, omelettes, mashed potatoes, soups, cottage pie, milk puddings and mousses



- Drinking extra fluids, any non-alcoholic drinks
- Using supplement drinks, such as Ensure plus and Complan. A referral will be made to the dietitians if required
- Avoiding very hot, spicy and sharp/tart foods and drinks, such as fruit or fruit juices and vinegar, which may sting
- By looking after your teeth and gums from the start of your treatment. It is important to brush your teeth at least twice a day, ideally after each meal and before you go to bed. If you wear dentures, clean them after each meal using a toothbrush and paste. You should soak your dentures in a denture cleaner overnight. Please also refer to our leaflet 'Radiotherapy that includes the mouth and care of your teeth'
- Rinsing your mouth regularly with the pink "Tellodont" mouthwash tablets (one tablet dissolved in a cup of pre-boiled, cooled water), that has been given to you by healthcare professionals at The Clatterbridge Cancer Centre. Use as required approximately four to six (4-6) times a day
- Avoiding alcohol, especially strong spirits
- Stopping smoking

Your skin or scalp

Your skin may become quite red, dry and itchy and may even peel or weep.

The reaction is similar to mild to severe sunburn. Any soreness should heal between four and six weeks after your treatment has finished. If your skin becomes uncomfortable, ask the radiographer or nurse for advice.

You can help yourself by:

- Not exposing the treated area to bright sunlight (natural or from a sunbed) during radiotherapy. Your skin in the area treated will **always** be more sensitive to sunlight and therefore you will need to continually wear high factor sunscreen in those areas if you go out in the sun
- Not wearing collars which rub your neck. Wear clothes with a soft loose collar
- Washing the area very gently in lukewarm water with a mild, unperfumed soap, e.g. baby soap, twice a day. A shower is ideal, patting the area dry with a soft towel. **Do not rub**
- Using an electric razor to shave. If your skin becomes very sore, it is best to stop shaving. The hair in the treatment area will stop growing and will gradually fall out. It may grow back again after your treatment has finished



- Not using lotions, make-up, aftershave or perfume in the area being treated
- Only applying creams recommended by your radiographer, nurse or Oncologist

Tiredness

It is quite common to feel more tired than usual during your treatment and for several weeks after treatment has finished. It is important to rest when you feel the need to do so and ask your family and friends to help when they can. If possible try and maintain your daily activities as this can be beneficial to you, gradually things will get back to normal.

Nutrition

It is very important for you to eat healthily and drink plenty of fluids during your treatment. We recommend about three to four pints of non-alcoholic fluids a day. This will help your tissues to heal and help you to fight off infection.

People often find that after a few weeks of treatment, they have to go onto a softer diet and near the end of your treatment a liquidised diet may be required. High calorie liquid supplements may be needed. These are available on prescription. Please ask any of the staff looking after you for advice if you are worried about your diet. You may find The Clatterbridge Cancer Centre patient information leaflet on 'Eating well and coping with side effects' useful.

We can arrange for you to be referred to a dietitian if necessary. Your weight will be monitored throughout your treatment. It is very important that you minimise weight loss as this can prevent healing of the irradiated tissues and delay your recovery. Occasionally, patients need to be admitted to our hospital ward to be fed via a nasogastric tube because they are finding it so difficult to swallow food and fluids. Whilst this tube is in place you will remain as an inpatient. When you are able to eat and drink enough in the normal way the tube can be removed.

Sometimes a gastrostomy feeding tube (PEG) is required which will be inserted directly into your stomach before any of the treatment starts. This is because we know that you are very likely to need nutritional support. Therefore, the tube will be used to supplement what you can manage by mouth. These feeding regimes can be managed at home. We will provide you with additional information if you require a gastrostomy feeding tube.

Possible longer term side effects

There are some possible longer term side effects which your Oncologist will discuss with you. These can occur months or even years after treatment. These late effects depend on what part of the head and neck was treated by radiotherapy. Some late effects can be treated with medication. Rarely, a surgical operation may be needed if the problem is serious.



Dryness of the mouth - This occurs whenever salivary glands are in the treatment area. Loss of saliva can result in dental decay.

Dental problems - When the mouth is dry, the teeth are no longer protected by saliva and are more prone to disease. If you need any teeth removing, your dentist should refer you to your local maxillofacial unit (see further information under "Damage to the bone or cartilage").

Skin colour changes - The skin in the treated area can become discoloured (usually slightly darker than your normal skin colour) or mottled. There may be patches of small blood vessels near the surface of the skin.

Swallowing problems - Sometimes the radiotherapy can cause a tightening of the tissues in the throat. This can make swallowing more difficult. If this is a problem, the speech therapist may be able to help in some cases. Your Oncologist or nurse will refer you if appropriate. The tissues of the neck can also become tighter and feel firmer to the touch. This is especially common if you have had prior surgery to the neck.

Weight loss - If you have lost weight during your treatment, you may find that it is difficult to get back to your normal weight after treatment, even though you may be eating quite well. This is common and, as long as your weight is steady, is not usually a problem. If you continue to lose weight after your treatment, please mention it to the Oncologist at your follow-up clinic appointment.

Ulcers - Sometimes the tongue and the lining (mucosa) of the mouth or throat can take a long time to heal, temporarily causing ulcers, which can be painful.

Damage to the bone or cartilage - In rare cases, there can be damage to the jawbone or to the cartilage of the voicebox (depending on the area treated). Occasionally, you may need surgery to correct this. This is more common in patients who continue to smoke during and after their radiotherapy. Having teeth extracted from a jawbone that has been treated with radiotherapy will increase the risk of bone damage. Please remember to discuss this with your Oncologist.

Completion of radiotherapy and follow-up

If your skin is very sore at the end of treatment, staff will arrange a district nurse to attend to you. Your skin reaction may worsen after your treatment has finished. If you are worried, please contact your Head and Neck clinical specialist nurse whom you will have met during your treatment.

You will receive a follow-up appointment to see an Oncologist at your local hospital, usually 4-6 weeks after treatment has finished. This appointment will be given to you by the treatment radiographers on your last day of treatment.

It can take many months before you feel you have recovered from the treatment side effects. If you are feeling low or experience mood swings, it may be useful to speak to your GP or Oncologist.



Some patients find it useful to have the support of others who have experience of cancer by attending local support groups. Contact the local Macmillan Cancer Information & Support Centre for more details.

Prescriptions

From 1 April 2009 NHS patients treated for cancer became entitled to free prescriptions. Prescriptions from The Clatterbridge Cancer Centre PharmaC are free for NHS patients. You will need an exemption certificate to get free prescriptions from a community pharmacy. Application forms are available from your GP or the Macmillan Cancer Information and Support Centre.

Contact details

To contact the Mould Room please ring **0151 556 5095**.

To contact your treatment machine, please see the contact details on your treatment appointment list for details.

It may be necessary at some stage during your treatment journey to require additional specialist support from the head and neck clinical nurse specialist, nutritional nurse practitioner or radiotherapy support practitioner. Doctors, nurse specialists and radiographers will be responsible for making these referrals. However, should you require further information please contact any of the specialist team by telephoning **0151 556 5000** and ask for the appropriate team member.

The Clatterbridge Cancer Centre Hotline 0800 169 5555

If you are unwell during or up to 8 weeks following your cancer treatment, please call The Clatterbridge Cancer Centre Hotline.

Your call will be answered by a dedicated nurse advisor. This line is available 24 hours a day, 7 days a week.

Macmillan Cancer Support

Macmillan booklets about coping and living with cancer and treatment side effects are available free of charge. These can be ordered by telephoning **0808 808 0000** or by visiting a Macmillan Information Centre (sited in the main entrances of Clatterbridge Cancer Centres - Wirral and Clatterbridge Cancer Centre - Aintree).

Macmillan Cancer Support

0808 808 0000 or www.macmillan.org.uk

Macmillan Cancer Information and Support at:

Clatterbridge Cancer Centre - Wirral 0151 556 5570

Clatterbridge Cancer Centre - Aintree 0151 556 5959

Additional Information

You may find the following The Clatterbridge Cancer Centre patient information leaflets useful:

- Radiotherapy that includes the mouth and care of your teeth
- You and your gastrostomy feeding tube
- Eating well and coping with side effects



How we produce our information

All of our leaflets are produced by staff at The Clatterbridge Cancer Centre and this information is not sponsored or influenced in any way. Every effort is made to ensure that the information included in this leaflet is accurate and complete and we hope that it will add to any professional advice you have had. All our leaflets are evidence based where appropriate and they are regularly reviewed and updated. If you are concerned about your health in any way, you should consult your healthcare team.

We rely on a number of sources to gather evidence for our information. All of our information is in line with accepted national or international guidelines where possible. Where no guidelines exist, we rely on other reliable sources such as systematic reviews, published clinical trials data or a consensus review of experts. We also use medical textbooks, journals and government publications.

References for this leaflet can be obtained by telephoning 0151 556 5570.

If you need this leaflet in large print, Braille, audio or different language, please call 0151 556 5570.

If you have a comment, concern, compliment or complaint, please call 0151 556 5203.

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