Radical radiotherapy to the head and neck

This information is for patients who are going to receive radiotherapy to the head and neck region. Further information is available in our general radiotherapy information leaflet. There is also a DVD or video available to loan. Please ask a member of staff if you are interested.

**What is radiotherapy?**
Radiotherapy is the use of accurately measured doses of radiation to treat cancers or other benign conditions. A prescribed treatment of radiotherapy is usually given over several weeks as an outpatient treatment. It may be used on its own or with chemotherapy. Most patients attend every weekday.

The duration of your course of treatment will depend on your individual needs. The consultant will decide this with you at your first visit. It is extremely important that you complete your course of radiotherapy to get the best response to the treatment.

We must by law obtain your written consent to this procedure beforehand. Staff will explain all the risks, benefits and alternatives before asking you to sign a consent form. If you are unsure about any aspect of the treatment proposed, please do not hesitate to speak with a senior member of staff.

**Preparation for treatment**
- Your treatment will be carefully designed just for you. Consequently you may need several visits to the department before your treatment starts.
- These visits may include appointments in the mould room/pre-planning, computerised tomography (CT) and/or simulator planning departments.

**Pre-planning**
- During your treatment, we will ask you to wear a shell or mask at each visit. This will be attached to the treatment couch to ensure you stay in the same position.
- Before the shell is made, the pre-planning radiographer will explain the procedure to you. The radiographer will talk to you either by phone, before your pre-planning appointment, or at your pre-planning appointment.
- The pre-planning appointment takes approximately an hour, although the actual time making the shell during this appointment is about 15 minutes. Modern methods of making radiotherapy shells are very quick. We use a special form of warmed material which can be moulded exactly to your individual shape.

**Treatment planning**
- Your treatment planning will be carried out using the CT scanner and/or a piece of equipment called a simulator. This may take up to two appointments.
- The simulator is used to take X-ray pictures. We will draw marks on the shell (or sometimes on your skin). These marks will help the treatment radiographer to position you accurately. The marks also show the radiographer where to direct the treatment.
Sometimes we will make permanent marks (tattoos) on your skin, instead of or as well as pen marks. These marks are tiny and will only be done with your permission.

After your planning session you will be given an appointment to start your treatment.

### Treatment

- Before each treatment session the radiographers will position you carefully on a treatment couch with your shell in place.
- Treatment times may vary but are usually between 15 and 30 minutes. You will have to lie very still while the treatment is being given, but you will not feel any discomfort. It is very similar to having an X-ray picture taken.
- During the procedure, your radiographers can see you via a camera. You can signal them if necessary. Music can be played during your treatment for your comfort. You can bring your own CD if you wish.
- During your course of treatment you will see your consultant, dietitian, speech and language therapist, and the head and neck clinical nurse specialist on a weekly basis to assess your progress. Your treatment radiographers will discuss the timing of these appointments with you.

### While you are undergoing treatment:

- Follow the instructions on the skincare leaflet you have been given.
- Do not smoke or consume any alcohol as these will exacerbate any side effects that the treatment may cause.
- Try not to eat hot or spicy food as it may irritate the lining of your throat.
- Clean your teeth regularly after meals and before bedtime. The dental hygienist and consultant in restorative dentistry will give you advice about this.
- You should use **aqueous creams** in the area being treated to help moisturise the skin to make it more tolerable to the radiotherapy. If your skin becomes moist or weepy, your consultant will prescribe a more effective medication for you to use.
- To clear nasal congestion, you can sniff a **saline rinse** (½ teaspoon of salt to ½ pint of cooled, boiled water). Make up the saline rinse in a bowl and gently breathe above the bowl to 'sniff' the warm air. Take care not to burn yourself. If this measure is not sufficient, your consultant will prescribe a stronger preparation.
- Your dentist or consultant will give you advice and instructions on using mouthwashes or medication during your treatment.
- If swallowing becomes sore or difficult, your radiographers will provide additional written information and advice.
- It is important to maintain your general health and wellbeing at this time. If you feel that you are not getting adequate nourishment or if you are concerned about excessive weight loss, please discuss this with your radiographers. They will be able to provide extra advice or may refer you to a dietitian or nurse specialist.

### A note for ladies of reproductive age

It is important that you are not or do not become pregnant at this time. If you have any concerns on this subject, please feel free to discuss them with your treatment radiographers or consultant.

### Possible side effects

The first radiotherapy side effects will start to appear around the second or third week of treatment. These side effects will gradually increase for about three weeks after your final
Most of these side effects are temporary and do improve, usually resolving within about six weeks.

**Sore skin**
- You may notice some skin changes in the area being treated.
- After about two weeks you may find that you have a skin reaction similar to sunburn.
- Please ask your radiographer for advice on how best to deal with this and for a skincare information leaflet, if you do not already have one.
- The skin in the area being treated will be more sensitive for many years. Once the skin has healed following radiotherapy, use a high factor sunscreen (factor 50+) on the area that has received treatment if you are exposing it to the sun. Keeping the area covered, for example with a hat, can also help.

**Sore mouth and throat**
- Depending on the area being treated, your mouth and throat may become sore and inflamed after a couple of weeks of treatment. You may also develop some mouth ulcers and your voice may become hoarse.
- You may become more sensitive to very strong flavours and/or heat and cold. Eating food may become difficult and swallowing painful. Your GP can prescribe painkillers to ease these problems.
- Drinking plenty of fluids, for example cool drinks (water and squash) or sucking ice cubes, will help to keep your mouth moist.
- Choosing softer food or puréeing your food may help you.
- You can discuss any problems with eating and drinking with a radiographer, dietitian, speech and language therapist, nurse specialist, dental hygienist and consultant in restorative dentistry.
- Once you have finished your course of radiotherapy, your mouth will gradually heal. Most people get back to eating normally a few weeks after their treatment has finished.
- Depending on the area being treated, you may need a feeding tube. This will ensure your nutrition and hydration needs are met. Your doctor and dietitian will discuss this with you if it is necessary.
- If a feeding tube is required, it will be important for you to continue to sip fluids regularly in order to maintain your swallow function. The speech and language therapist may also give you exercises to help reduce the effect of radiotherapy on eating and swallowing.

**Dry mouth**
- You may notice that you cannot produce as much saliva as before the treatment. The lining of your mouth and throat may become dry. This can make speech difficult.
- You may also notice a feeling of sticky mucus in the throat as sometimes radiotherapy makes the saliva thick and stringy. This can be very distressing. To reduce the dry feeling, frequent sips of water are essential. There are also products to help such as saliva spray, pastilles and gel.
- If your mouth, throat, or the upper part of your neck is being treated, your mouth may become permanently dry.
- Normally your saliva acts as a protective film over your teeth. If you have a dry mouth, you will need to take special care of your teeth. They will be much more prone to tooth decay.
- Follow the dental hygiene advice that you are given by the dental hygienist and consultant in restorative dentistry.
• You will need to see the dental hygienist and consultant in restorative dentistry regularly. This is because your mouth may be sensitive and easily irritated during your treatment.

**Loss of taste**
• If part, or all, of your mouth is treated, your sense of taste will change quickly during your radiotherapy. It may take many months for it to return to normal.
• Some people lose their sense of taste completely. Others find that everything tastes the same (usually rather metallic or salty, or like cardboard).

**Loss of appetite**
• You may find you have a loss of appetite. However, it is important that you aim to maintain your weight during your treatment.
• You will meet weekly with the dietitian to get suggestions to improve your appetite. Oral nutritional supplements are also available if you find eating becomes increasingly difficult.

**Hair loss**
• For most people, radiotherapy for cancers of the head and neck will not cause any hair loss. If it does occur, the amount of hair lost will be very slight.
• Hair loss occurs only in the areas where the X-ray beam enters and leaves your body.
• Your doctor will advise you if permanent hair loss is likely in your case. The doctor and can also tell you where any hair loss is likely to occur.

**Tiredness**
• You may find that the treatment makes you feel very tired.
• Try to get as much rest as you can, especially if you have to travel a long way each day for your treatment.

**Feeling sick (nausea)**
• This is uncommon, but your doctor can prescribe anti-sickness tablets or medicines (anti-emetics) if it is a problem.

**Bad breath**
• This may develop during treatment. It may be helped by regular mouth care and mouthwashes, as recommended by the oncology doctor, radiographers, specialist nurses or the dental hygienist and consultant in restorative dentistry.

All the side effects mentioned above can be upsetting and difficult at the time. However, it is helpful to remember that many are temporary and will gradually disappear. These side effects occur especially towards the end of the course of treatment and during the first couple of weeks after your treatment has finished. The effects can be mild or more troublesome, depending on the dose of radiotherapy given and the length of your treatment. Your doctor will be able to advise you what to expect and can offer treatment to help to relieve the side effects.

**Late side effects**
• A common late effect is dryness of the mouth with associated taste changes. In some instances this can lead to tooth decay.
• The lining of the mouth and/or throat may become sore and even ulcerated.
• Your swallowing may become uncomfortable due to tightening of the surrounding tissues.
• Rarely, a change in the appearance of the skin called telangiectasia may occur. This is caused by tiny blood vessels under the skin becoming dilated (swollen). This can be unsightly but does not cause problems.
As a result of the radiotherapy, you will be more at risk of infections in your jawbone after any tooth extractions. This is one of the reasons why you will see the consultant in restorative dentistry before treatment. The consultant will assess your teeth and arrange extractions if needed before treatment starts.

Patients who have received treatment to the neck may, in rare cases, develop problems with the larynx (voice box) and underactivity of the thyroid gland.

It must be remembered that these effects are rare and can, in some instances, be corrected. If you have concerns, please talk to your oncology doctor, radiographer or nurse specialist.

Dental work
- Following radiotherapy it is essential that any extractions are undertaken in the maxillofacial department and not by your own dentist.
- The consultant in restorative dentistry will monitor your progress as required.

Emotional support
It is not unusual to have feelings of anxiety, fear or sadness during your treatment. The oncology team are there to support you and will always make time for your needs. If you are feeling down, it may help to talk with a friend or relative. Sometimes, it can help to talk with someone outside the family who has been through a similar experience. We have a trained counsellor who is available if you need to talk in more depth and in confidence. If you would like to arrange this please, speak to one of your radiographers or contact your nurse specialist.

Complementary therapies
The department has an aromatherapist who offers hand and foot massages to all patients. Details are available from your radiographers.

Chapel
There is a chapel within the hospital which is open to people of all faiths. If you need any further information, please speak to one of your radiographers.

Contact details
Dorset radiotherapy helpline (DORAH)
Telephone: 01202 442481

Telephone the Dorset radiotherapy helpline (DORAH) if you need any advice about your radiotherapy treatment. It is open from 8.15am to 5.30pm but you can leave a message at any other time. Please note the DORAH helpline is not for emergencies.

Oncology patient hotline
Tel: 07917 655 889

This number can be used at all times of the day or night for urgent enquiries. In the event that your call is not answered, please leave a message stating your name, hospital number and contact telephone number. You should be contacted by a nurse within half an hour. In the unlikely event that you are not called back within half an hour, please call again.

Head and neck clinical nurse specialist
Telephone: 01202 442365 or 01202 442071

Dietitian
Telephone: 01202 442593
Speech and language therapists
Telephone: 01202 442933

Macmillan Cancer Support
89 Albert Embankment,
London,
SE1 7UQ
Telephone: 0808 808 0000 (Monday to Friday, 9am-8pm)
Website: www.macmillan.org.uk

For further general health-related information, please ask the relevant department for an Information Prescription or contact:

The Health Information Centre
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Longfleet Road
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We can supply this information in other formats, in larger print, on audiotape, or have it translated for you. Please call the Patient Advice and Liaison Service (PALS) on 01202 448499, text 07758 272495 or email pals@poole.nhs.uk for advice.

If you wish to make any comments or to ask about any research evidence used to write this leaflet, please contact the Patient Information Team confidentially: phone 01202 448003, write to the Health Information Centre (address above), or email patient.information@poole.nhs.uk.