

## Arden Cancer Centre

# Radiotherapy Information for Patients Undergoing Treatment to the Head and Neck

## Introduction

As part of your treatment plan your doctor has recommended radiotherapy treatment at the Arden Centre. The aim of this booklet is to provide you with information about the centre and about radiotherapy including the possible side effects of your treatment.

Please read this information and ask any questions that you may have. Contact numbers are provided at the end of this booklet.

## What is Radiotherapy?

Radiotherapy is the use of high-energy radiation, usually X-rays, to kill cancer cells in the area being treated. Radiotherapy can damage normal cells in the treatment area as well, but they can usually repair themselves, whereas cancer cells can't. The damage to normal cells results in some side effects but radiotherapy is planned very carefully to avoid treating as much healthy tissue as possible in order to reduce these side effects.

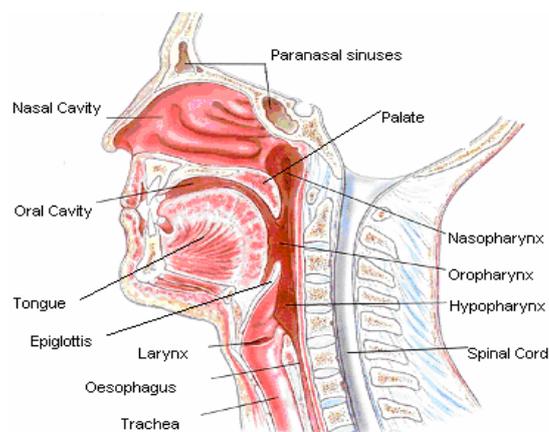


Diagram showing areas of the mouth, throat and neck



## Patient Information

Radiotherapy is delivered by highly trained staff called Therapy Radiographers on treatment machines called Linear Accelerators.

Both male and female staff will treat you. We are a teaching hospital and have student radiographers on placement in radiotherapy who are supervised by trained staff.

### **Consent forms**

Before you undergo this procedure you will be required to sign a consent form which indicates that your doctor has explained the treatment procedure and any possible side effects to you.

### **Pacemakers**

**If you have a pacemaker please mention this to both your doctor and to the radiographers, before your first treatment.**

### **Pregnancy**

If you are, or become, pregnant at any time before or during your treatment it is important to inform a member of staff as soon as possible. There is a significant risk to an unborn baby from radiotherapy.

If you are pregnant, it is sometimes possible to proceed with treatment and overcome the risk by adjusting your treatment plan. This would only be done with your full involvement and consent following discussion with your consultant.

For advice on contraception please speak to your consultant or GP.

### **Chemotherapy**

Your doctor may also prescribe chemotherapy to be administered during your course of radiotherapy. You will be given specific written information and consented separately for this.

### **Preparation before treatment starts**

Radiotherapy to the head, neck and mouth is complex and requires considerable preparation.

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If your mouth is to be included in the radiotherapy field, we need to make sure your teeth and gums are healthy. Before you start treatment, you will need a full mouth examination. You may be referred to the restorative dentist at the hospital for this.

### **What is treatment planning?**

Usually a period of planning or preparation is required before your treatment can start.

This may involve an initial visit for preparation and then a gap of two to three weeks before your treatment starts, during which time doctors, physics staff and radiographers are preparing your treatment.

### **What will happen at the planning appointment?**

You will need to wear a mask which will cover your head, neck and shoulders during your treatment. This mask is perforated so that you can breathe through it. The mask will help you to keep very still, and to make sure that you are in the same position each time you have your radiotherapy. You will have the mask made on your first visit to the Arden Centre.

You may be required to remove clothing from your upper chest and shoulders and neck for your planning visit and subsequent treatment. Ladies might prefer to wear a vest top with straps that be easily pulled down. Gowns are available if you need one. If you have a beard, we would recommend that you have this shaved before you attend your Mould Room appointment.

Once the mask is made, you will have a CT scan afterwards whilst wearing the mask to allow the doctor to plan the area to be treated. This is a specialist CT scan in the Arden Centre, it is used to define the exact area to be treated. It is not a diagnostic scan so there will be no results to give you.

### **Contrast**

Sometimes a contrast medium is used to help the radiographers, doctors and physics team to see organs more clearly on the CT scan. This can be given orally, injected into a vein or both. You will be told if you need

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contrast and given information about it. If you have had contrast before and had any kind of reaction to it please let your doctor or the radiographers know. This is only required for treatment planning and not whilst you are on daily radiotherapy.

## Treatment

The radiographers will deliver the treatment as prescribed by your consultant. It is essential to make sure treatment is given safely and accurately, you will be positioned on the treatment couch in the same way as when your treatment was planned. The radiographers will fit your mask, then position you by dimming the room lights and using laser lights and a light from the machine. The machine may move around you during this process but will not touch you.

When you and the machine are in the correct position, the radiographers will leave the room to switch the machine on. You will need to lie quite still but can breathe normally. You will not feel anything during the treatment but the machine will make a buzzing noise and will move around you but will not touch you.

You will be in the treatment room for about 15 minutes, most of this time is taken up with getting you into the correct position for treatment and taking images to check the accuracy of the treatment, the treatment itself is very quick, just a few minutes. The radiographers will be watching you throughout on closed circuit television cameras and can hear you on an intercom. They can switch the machine off and enter the room if you move or call them.

Once the machine has switched off there is no radiation present, you will not be radioactive and will be safe to be near pregnant women and children.

## Treatment Progress

Although we take images of the treatment area during your radiotherapy, they are to check the position of the treatment field and are not used to assess the effects of the treatment. There is a delay in the way that radiotherapy works, so the effects of treatment cannot be assessed until a number of weeks after the treatment has finished.

### **What are the side effects of treatment?**

Treatment is painless but will cause side effects. It is unlikely that you will experience all of the side effects listed below. Treatment affects people in different ways and it can be difficult to predict which side effects will affect you and how severe they will be.

Side effects can be thought of as early (acute) and late (chronic)

### **Early Side Effects**

These early side effects occur during your treatment and for a short while afterwards:

#### **Effects on the skin**

Radiotherapy causes changes to the skin during treatment. These changes cannot be prevented but by looking after your skin the onset of symptoms can be delayed.

The skin in the treatment area will gradually become pink and sore after a couple of weeks of treatment. These changes may take 6 weeks to get back to normal after treatment has finished. Please ask your treatment radiographers which parts of the skin are included in the treatment. This may include your face, ears, scalp, the front and back of your neck and upper chest.

#### **Washing:**

- You can continue to wash or shower your skin in the treatment area, with care. Use warm water and your usual soap, pat dry with a soft towel, taking care not to rub.
  - Continue to use the moisturiser that you prefer, apply frequently. No specific moisturiser can be recommended as there is no evidence to support one over another, if you don't have a moisturiser at home ask the radiographers and they will be able to suggest options for you.
  - Do not use other ointments, creams or products on the area being treated, including make-up or after-shave lotion because other products can make your skin more likely to become sore.

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- If your skin becomes moist, broken or sore, speak to the radiographers as soon as possible. Specialist advice can be given, and dressings applied by the team at the Arden Centre.

### **In general:**

Loose clothing should be worn over the treated area. Where possible wear pure fabrics such as cotton next to the skin.

Avoid the use of hot water bottles, heated pads or ice packs over the treatment area.

- Avoid exposing the treated area to the sun during and for several weeks after treatment, until any skin reaction has settled.
- Care should then be taken in the future as the skin in the treated area will be more sensitive to the sun.
- A high factor sun screen or sun block should be used. Avoid scratching, vigorous rubbing and massage of the treated area.
- Do not use a tanning / sun bed.
- Do not swim if you have visibly red or moist skin. If you have no skin reaction and you do swim, shower well before and after and apply your moisturiser after.

### **Shaving:**

- Reduce shaving if possible. Dry shaving with an electric razor is preferable but stop when the treated skin gets pink and itchy, (2 to 3 weeks after the start of treatment). The Radiographers will advise you about this.
- The hair within the treatment site will probably stop growing about three weeks after your first treatment.
- Hair loss may be permanent in the treated area.

### **Effects on your mouth and throat**

If your mouth is included in the treatment area you will experience side effects-:

- The saliva in your mouth will start to become thick and later the mouth will become dry.
- Food will become tasteless.

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- After 2 weeks the inside of your mouth is will become painful and sore and then it can become ulcerated.
- As your throat becomes dry, swallowing may be difficult.
- You may experience an irritating cough, especially when you lie down. It may be helped by frequent sips of fluid (carry a bottle of water around with you).
- If your voice box is in the treated area it is likely to become hoarse as treatment progresses. We suggest that if this happens you rest your voice as much as possible. Hoarseness is likely to continue for a while after treatment has been completed.
- Avoid drinks that may further dry your mouth such as alcohol.
- Pain relief medication will be prescribed by your doctor and then continued by your GP.

## Mouth care for Patients

During radiotherapy it is very important to:

- Keep your mouth moist with regular sips of water.
- Brush teeth /gums using a small soft toothbrush (and a non-abrasive, fluoride toothpaste if tolerated) at least twice daily.
- Do not use a commercial mouthwash as they may contain alcohol which will dry and irritate your mouth. Mouthwash can be prescribed for you.
- Your lips can also become sore – using your moisturising cream or a lip balm will help.
- You may be prescribed medication to keep your mouth clean and help prevent infections.
- The following mouthwashes can be used; gargle, swill them around your mouth and then spit out:
  1. Use a **salt-water mouthwash** at least 4 times a day to help keep your mouth clean. Mix half a teaspoon of salt in a pint of lukewarm water.
  2. For thick saliva try using a small amount of a **bicarbonate of soda mouthwash** (not baking powder), dissolve half a teaspoon first in a pint of boiled water and then top up with lukewarm water.

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- Steam inhalation may help with thickened saliva and an irritating cough. Try breathing in steam from a small container of hot water or allowing steam to build up in the bathroom when you shower, this will help to keep your throat moist. Do not add any menthol or Vicks.

## Denture care

Dentures should be removed and cleaned after each meal.

- Brush your dentures with a mild washing-up liquid using a small soft toothbrush. This is kinder to all sorts of dentures as it does not scratch them. Rinse thoroughly in cold water.
- Soak your dentures overnight in cold water.
- You should wear dentures as little as possible during the course of your radiotherapy and afterwards until any soreness in the mouth has completely healed.

**Remember - If you are not wearing your dentures you must keep them in water to keep them in good condition.**

## Smoking

It is very important that you stop smoking. Smoking makes the treatment side effects far more severe and difficult to tolerate and reduces the chance of curing your disease. If you need advice on stopping smoking, ask the Macmillan Head and Neck Nurse Specialist or contact your local NHS Stop Smoking Services or your GP.

## Alcohol

It is advised that you avoid alcohol during treatment to prevent increased side effects.

## Your diet

You may find that it becomes difficult to swallow as your throat becomes sore. It is important that you continue to eat and drink during your treatment in order to aid healing and recovery and maintain your strength. Avoiding weight loss will also help to keep your mask fitted correctly.

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You will be given help and advice weekly during treatment by the Head and Neck Team, which includes your Clinical Nurse Specialist, Dietitian and Speech and Language Therapist. An appointment will be scheduled with the team on a Wednesday alongside your daily radiotherapy treatment. You will also see your consultant on a weekly basis during your radiotherapy.

Some basic advice to follow includes:

- Avoid food that is rough, hard or sharp and very spicy, salty or acidic tasting food as it can irritate your mouth.
- Eating little and often to stimulate your appetite
- Avoid very hot or cold temperatures of food and drink.
- Modifying the texture of your food by adding extra sauce, mashing or blending.
- Supplement drinks may be prescribed.
- Tube feeding may be needed to support you.

### **Hair loss**

Radiotherapy only causes hair loss from the treated area and occurs after about three weeks of treatment. This may result in patches of hair loss depending on how the treatment is delivered, you will not lose your whole head of hair. Ask the radiographers where you are likely to experience hair loss.

In some cases hair loss might be permanent. Please ask your consultant if this will affect you.

If treatment is below your earlobes you can wash and dry your hair normally and visit your hairdresser. When treatment includes part of the scalp we suggest that you use a mild shampoo, to avoid irritating this treated area. It is preferable to dry it naturally, rather than use a hair dryer.

### **Fatigue**

Most patients having radiotherapy feel more tired, particularly towards the end of treatment. If you feel tired you may need extra rest. However,

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evidence suggests that gentle exercise such as a short walk can help tiredness and fatigue

If you regularly exercise, it is acceptable to continue with your normal exercise routine unless the treatment team advise against this.

These early (acute) effects slowly worsen during the course of the radiotherapy treatment and start to improve after the course has completed. They often improve gradually over 6 to 12 weeks.

### **Late effects of treatment**

Late effects occur months or years after treatment has finished. These include:

- A dry mouth which may improve but can be permanent, but your doctor will discuss this with you.
- A change in taste may take some time to return to normal, and often it may never completely return the same way and can be different long term.
- The sore mouth and skin will recover, but may take 6 to 8 weeks to do so. It is important that you continue the routine of keeping your mouth and teeth very clean during this time.
- If you have problems with swallowing or jaw stiffness, the Speech and Language Therapist may be able to help.
- When your mouth is dry, there is an increased risk of deterioration of your teeth. It is important that you see your dentist and hygienist regularly. Brushing with fluoride toothpaste will help and you may need a fluoride mouthwash. Your restorative dentist will advise you about this.
- On occasion the jaw bone can be affected by radiotherapy, this is called osteoradionecrosis. This can be a problem if teeth need to be removed in the future. Please discuss this with your doctor.
- There may be some thickening or swelling of the treated skin and underlying tissue which can continue indefinitely after the radiotherapy is complete. The skin may also appear darker in colour in the area treated.

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- Depending on the location of your cancer and area receiving radiotherapy, there may be a risk of nerve alteration. Nerve alteration can also be caused by some chemotherapy drugs.
- Hearing may sometimes be affected after treatment for some types of cancer.
- There is very small risk of developing a secondary cancer in the treated area in the years following radiotherapy.
- It is important to discuss all these possible side effects with your doctor.

For more detailed information, we recommend that you read 'Managing the Late Effects of Head and Neck Cancer Treatment' produced by Macmillan Cancer Support which contains more detailed information on the late effects of head and neck cancer treatment and how to cope with them. Please ask for a copy or visit the Macmillan Cancer Information Centre in the main hospital entrance.

### **Where is the Arden Centre?**

The Arden Centre is situated in the west wing of University Hospital Coventry. Please visit the University Hospital web site for up to date maps and directions: [www.uhcw.nhs.uk](http://www.uhcw.nhs.uk)

### **How shall I travel?**

#### **By car**

You can drive whilst having radiotherapy treatment unless you have been advised not to for another reason.

Sat Nav postcode: CV2 2DX

At busy times it can be very difficult to park so please allow extra time. There are several visitor car parks across the site and there are drop-off points near the main entrance and the Women's and Children's entrance which allow for 10 minutes of free parking. Disabled car parking facilities are located near the main entrance. Charges apply in all car parks and Automatic Number Plate Recognition (ANPR) is live across all visitor car parks, this means that our car parks no longer issue tickets at barriers and instead read your number plate as you enter. Payment is then

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required at one of the payment machines before exiting the car park and can be made using cash, card or contactless. Payment can also be made by telephone or online before midnight, see the trust website for details.

### **Public Transport**

Many bus routes include the hospital with buses driving onto the site, stopping close to the main entrance. For more information about bus services to University Hospital call the traveline on: 0870 608 2608 or visit [www.networkwestmidlands.com](http://www.networkwestmidlands.com)

### **Hospital Transport**

Hospital transport is available where there is a medical need, not for social or financial reasons.

If you receive Disability Living Allowance Mobility Component or have a vehicle under the mobility scheme you may not be entitled to access hospital transport.

If you need hospital transport and feel that you are eligible you will need to book it yourself, giving 48 hours notice. You will need to telephone:-

### **West Midlands Ambulance Service**

01926 310312 (for bookings only)

01926 488410 (for queries on day of travel only)

### **Leicestershire Ambulance Service / Arriva / Ambuline**

0845 2669662

### **Northamptonshire Ambulance / NSL**

0843 2086888

### **Worcestershire Acute Trust Transport Service**

01905 760439 (for bookings)

01926 310311 (for queries on day of travel)

## Patient Information

In most cases you will not be able to bring anyone with you. Whilst your transport will be booked to get you to the hospital for your appointment time this cannot be guaranteed but you will be treated as soon as possible after you arrive. Due to the demand on the hospital transport service patients will often be waiting at the Arden Centre to be taken home for some considerable time. We advise that, where possible, patients make their own travel arrangements. If you have to rely on the hospital transport service, please ensure that you bring food, drinks and any medication that you may need for the day with you. There is a refreshment kiosk available to buy snacks and drinks which is open from 10am-4pm.

### **Transport Schemes**

There are transport schemes operating in some areas. These schemes will charge a mileage rate which varies. For more information please ask to speak to the Macmillan Radiotherapy Specialist.

### **Travel costs**

The NHS Hospital Travel Cost Scheme enables people in receipt of certain benefits or who are on a low income to claim back some of their travel costs. Please ask to speak to the Macmillan Radiotherapy Specialist for more information.

### **Prescriptions**

All cancer patients are entitled to free prescriptions. If you haven't already got an exemption card please ask a member of staff for an application form.

### **Appointments**

The department is usually open from 9.00am – 5.00pm Monday to Friday and is closed at weekends and on public holidays.

Radiotherapy treatment machines are very complex; they are maintained by a team of in house physicists and technicians. Delays in treatment can occur due to machine breakdowns and servicing.

Breaks in treatment due to public holidays and machine maintenance do not affect most people's treatment. However, some patients may be

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asked to come in for treatment on these days, when a different treatment machine could be used.

It is not advisable for you to miss any other appointments, but if it is unavoidable please talk to the radiographers who are treating you.

The radiographers arrange treatment appointment times. Every effort will be made to give you times that you prefer, but with a heavy workload this cannot be guaranteed.

It is important that we have a contact telephone number for you as we often have to telephone patients at short notice, about appointments or with other information.

If your telephone is set to bar incoming calls from withheld numbers, please give us an alternative telephone number.

### **Follow-up clinic appointments**

After finishing treatment your Head and Neck Team will continue to support you. You will also receive an appointment to see your consultant in the outpatient department between 6 and 8 weeks later.

### **Other Sources of Support and Information**



The Macmillan Cancer Information Centre is situated on the Ground Floor, University Hospital. Open Monday to Friday 9.00am to 4.00pm.

The centre is staffed by a Cancer Information Specialist, and offers free confidential support and information on types of cancer, treatments, living with cancer, controversial issues, support groups and other organisations.

You can visit the Centre or telephone: 024 7696 6052

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Or via the internet: [www.macmillan.org.uk](http://www.macmillan.org.uk)

National telephone number 0808 808 00 00

## Counselling

**There is a counselling service available at the Arden Centre, for more information speak to your specialist nurse, doctor or radiographer, or telephone 024 7696 7478.**

## Complementary Therapy

Aromatherapy, reiki, massage, reflexology and yoga are available to oncology patients. Therapists are volunteers and provide their services to patients free of charge. Due to high demand these sessions are limited to two per patient.

Complementary therapies are by appointment only, please ask a member of staff or telephone 024 7696 7290.

The Macmillan Radiotherapy Specialist is available in the department to help you with any queries concerning the above. Please ask at the reception desk.

## Useful telephone numbers

**Arden Cancer Centre:** Monday to Friday 9am – 5pm

For queries concerning appointments, parking and ambulance transport

**Radiotherapy reception:** 024 7696 7272,

**Cancer and radiotherapy information and advice:** 024 7696 7290

Macmillan Radiotherapy Specialists and complementary therapy

**Head and Neck Clinical Nurse Specialist:** 024 7696 6452

**Speech and Language Therapy:** 024 7696 6449

Dietitian: 024 76963861

## Patient Information

**Oncology Ward 35:** 024 7696 5525 or 024 7696 5528 or 024 7696 5531 (24 hour emergency advice only and for chemotherapy patients)

**NHS advice** – use the 111 service

**Macmillan Cancer Support:** 0808 808 00 00

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

## Patient satisfaction

We hope you have found this booklet useful. We welcome your comments on the care you experience, and service we offer within the Arden Cancer Centre.

We ask that specific complaints be addressed to a member of staff so that, in line with University Hospitals Coventry and Warwickshire NHS Trust Complaints Policy, they can be dealt with quickly and efficiently.

If you need help, information or advice, either during, or at any time after your course of treatment has finished, please contact the Macmillan Radiotherapy Specialist.

Telephone 024 7696 7290 Monday to Friday, 9.30am to 4.30pm.

In emergencies and out of office hours, including bank holidays, you should contact your own GP.

Written by Alison Crichton and Julia Biggs, (Macmillan Radiotherapy Specialists)

With help and advice supplied by the Medical Staff of the Arden Cancer Centre, Macmillan Head and Neck Clinical Nurse Specialists, Macmillan Dietitians and Speech and Language Therapist.

## Patient Information

The Trust has access to interpreting and translation services. If you need this information in another language or format, we will do our best to meet your needs. Please contact 024 7696 7290.

The Trust operates a smoke free policy

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