



Arden Cancer Centre

Radiotherapy information for patients undergoing treatment for colorectal / anal cancer

What is radiotherapy?

Radiotherapy is the use of high-energy radiation to kill cancer cells in the treatment area. Radiotherapy can also damage normal cells in the treatment area. This can cause some side effects.

We plan radiotherapy very carefully to protect as much healthy tissue as possible and reduce these side effects. The tissues usually heal with side effects and symptoms improving over time.

Radiotherapy is delivered by highly trained staff called Therapeutic radiographers. It is delivered on machines called linear accelerators.

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

For more information about radiotherapy and to watch our department video go to:

https://www.uhcw.nhs.uk/our-services-and-people/our-departments/radiotherapy/



Consent forms

Before you have this procedure, you'll need to sign a consent form. This indicates that:

- your doctor has explained the treatment procedure and any possible side effects to you, and
- you agree to go ahead with treatment.

Pacemakers

If you have a pacemaker or implantable defibrillator, please tell your doctor and the radiographers before your first treatment. Treatment can alter the performance of your device. It may need testing before and after treatment is given.

Pregnancy

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

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

Chemotherapy

Your doctor may also prescribe chemotherapy to be given during your course of radiotherapy. You'll receive specific written information and give your consent for this separately. You usually need to have weekly blood tests when on chemotherapy and radiotherapy together. If you have not been advised about this, please ask.

What is treatment planning?

A period of planning or preparation is required before your treatment can start. This is to allow:

- accurate "aiming" of the radiotherapy at the treatment area
- calculation of how to deliver the correct dose of radiation to the treatment area

CT Planning Scan

To treat you accurately and reduce side effects, your radiotherapy treatment must be carefully planned. This will involve having a CT scan in the radiotherapy department.

For the CT scan and later treatments, you'll be required to remove the clothing over your pelvis. We'll make every effort to keep you covered where possible. Gowns are available if you need one.

You will be positioned on the CT couch by the radiographers. You will lie on your back with sponges under your head, knees and feet for support. This is the same position that you will be in everyday for your radiotherapy treatments.

After the CT appointment there will a gap of 3 to 4 weeks before your treatment starts. During this time, doctors, physics staff and radiographers are preparing your treatment.

Skin marks

At the CT scan, you will have felt tip pen marks put on to your skin. These are used as a reference for the planning process and during treatment. With your permission, we can put tiny permanent dots of dye beneath the skin called tattoos. These will not wash off. If we cannot do this, you will need to keep felt tip pen marks on your skin for all of your treatment.

Contrast

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

If you've had contrast before and had any reaction to it, please let your doctor or the radiographers know. Contrast is only needed for treatment planning and not for daily radiotherapy.

Bowel and bladder preparation

For your CT scan and your radiotherapy appointments you should try to open your bowels daily and avoid being constipated. Continue with laxatives if you are using them already.

Drinking at least 2 litres (4pints) of fluid a day will help to keep you hydrated and to keep your bowels regular.

You will need to have a full bladder for your CT scan and all of your radiotherapy appointments.

Bladder preparation:

The amount of fluid and time it takes to fill the bladder varies from one person to another. We suggest you try the following: -

- 1 hour before your appointment, empty your bladder.
- Then drink 300ml of water (1/2 pint) straight away.
- Do not urinate until your treatment appointment is completed.
- If you cannot hold your urine, please inform the receptionist who will inform your radiographer.
- If you find it difficult holding your urine for 1 hour, we recommend that you practise the above instructions every day from receiving this information to your CT planning scan and subsequent treatments.

Cutting down on caffeine may help with bladder control; try to reduce your intake of coffee, tea and cola. There are caffeine free alternatives available. You may find that you get a slight headache initially if you normally have a lot of caffeine.

Pelvic floor exercises may help you to hold your urine for longer, but it can take several weeks or months to notice an improvement.

Treatment

You will need to fill your bladder in the same way you did for your CT planning scan.

Radiographers will deliver the treatment as prescribed by your consultant.

You will need to remove the clothing from the treatment area. You will be positioned on the treatment couch in the same way you were when your treatment was planned. Remember to keep your bowels moving daily.

The radiographers will dim the lights and use laser lights to line up your tattoos. Once you and the treatment machine are in the correct position, the radiographers leave the room to switch the machine on. You need to lie quite still but can breathe normally.

During treatment, the treatment machine will move around you, but nothing will touch you. You will not feel anything during the treatment. The machine will make a buzzing noise.

The treatment times are very short. Images are taken before to check that the treatment is correct before it is given. The radiographers watch you all the time on a screen. They will turn the machine off and enter the room if you move or call for help. Most people will be in the treatment room for about 15-20 minutes.

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

Your radiotherapy doctor will discuss with you the total number of treatments that you need and how often you need to attend the department.

What are the side effects of treatment?

Treatment is painless but it can cause some side effects. Treatment affects people in different ways. It's difficult to predict which side effects will affect you and how severe they will be.

Side effects can be early (acute) and late (chronic).

Early or short-term side effects

These happen during your treatment and for several weeks afterwards:

Effects on the bowel

- Pain in your tummy (abdomen) or back passage (rectum/ anus) when opening your bowels.
- A bloated and tender feeling in your tummy.
- Feeling the need or needing to empty your bowel (poo) urgently and frequently.
- Loose stools (poo), possibly diarrhoea.
- · Passing a lot of wind.
- Passing mucous or blood when you empty your bowels.
- Some bowel incontinence

Advice

- Try to eat your usual diet and avoid missing meals. If you are struggling to eat or losing weight, we can arrange for a dietitian to see you.
- Drink plenty of fluids, aim for at least 2 litres (4 pints) per day.
- If necessary, we will advise you on medication to help control diarrhoea.
- Avoid foods and drinks that give you wind, such as leafy greens, pickles, beans, curries and fizzy drinks.

Effects on the bladder (cystitis)

- Passing urine (peeing) more often than usual.
- Pain / stinging when passing urine.
- Passing urine during the night.
- Feeling that you can't wait when you need to pass urine (urgency).
- · Leaking small amounts of urine.

Advice

 Drink well, aim for at least 2 litres (4 pints) a day – keep your urine light in colour.

- Avoid drinks that can irritate the bladder such as tea, green tea, coffee, alcohol, cola, fruit juices, fizzy drinks, and drinks with artificial sweetener, avoid eating citrus fruits.
- It is ok to drink water, squash, herb / fruit tea or caffeine-free drinks.

Please tell the radiographers treating you if you think you may have urinary problems.

Effects on the skin

- Radiotherapy may cause a skin reaction like exposure to the sun in the treatment area.
- Towards the end of treatment, the skin may become red and/or dry and itchy.
- Patients receiving treatment to the lower rectum / anus will get a more severe skin reaction. Moist patches may develop and you may need to have dressings applied.
- If your skin is very sore you may need to take painkillers towards the end of treatment and for 3 to 4 weeks after.

We advise that you: -

- · Wash the treated area daily with your usual soap or shower gel.
- Use a soft towel to pat your skin dry.
- Apply your usual moisturiser to the skin in the treatment area 2 or 3 times a day. Gently smooth it onto your skin until it is absorbed. Do not apply just before treatment.
- If you need to, ask your GP to prescribe a suitable skin moisturiser.
 Or discuss this with your treatment radiographers at the start of your radiotherapy. They may be able to give you a sample moisturiser to try.
- Avoid wearing tight clothes in the area being treated (cotton is a good natural fibre).
- · Avoid the use of sun lamps, spray tans or skin colouring lotions.
- Avoid using hot water bottles or ice packs in the treatment area.
- Avoid shaving in the area being treated. If you must shave use an electric razor for dry shaving only. When the skin becomes visibly

- red, stop shaving. No wet shaving, hair removal creams, lasers or wax should be used.
- If the skin becomes very sore or broken you will be seen by the Macmillan radiotherapy specialist or tissue viability assistant practitioner, who can provide creams and dressings as needed.

Swimming

You may continue to swim during radiotherapy if your skin is not blistered or peeling. You must wash the treatment area before and afterwards and apply moisturiser. Be aware that chlorinated water can have a drying effect on the skin. Do not swim if you have an infection or your skin is irritated.

You may not be able to swim whilst on chemotherapy due to the risk of infection. Please check with your specialist nurse.

Other effects

Tiredness

- Most people will feel tired because of radiotherapy treatment.
- Tiredness will often come on slowly as the treatment progresses. It may last for several weeks after the treatment has finished.
- If you feel tired, try to rest as much as you can. Research has found that gentle exercise such as taking a short walk can help with tiredness.

Nausea / vomiting

Let the radiographers know if this is a problem. It is possible to get a prescription for anti-sickness tablets. Eating light meals and drinking plenty of fluids can help.

Hair loss

You will only lose hair in the treatment area, so you may lose some pubic hair.

Sexual organs

Sexual organs may become swollen and / or painful – this may make sexual activity more difficult.

Smoking

If you smoke, try to stop. Smoking can make treatment side effects more severe and the treatment harder to tolerate and less effective.

Late or long-term side effects

Late side effects can happen months to years after you have completed treatment. These may include:

Bowel changes

This can include frequent, loose bowel motions, mucous discharge, a change in consistency of stools, urgency, bleeding, bowel incontinence, pain on opening bowels, constipation and wind.

There is a small risk of narrowing of the bowel or anal canal which can result in the need for surgery.

Bladder changes

This can include frequency, urgency and reduced bladder capacity, difficulty passing urine, straining to release urine, pain, leakage or incontinence.

Bone pain

There is a small risk of radiotherapy affecting the bones of the pelvis causing them to become weak. Sometimes, tiny cracks can appear in the pelvic bones some years after treatment. They are called pelvic insufficiency fractures.

Skin thickening or discolouration

Skin in the treatment area may seem lighter / darker or there may be visible small blood vessels present (telangiectasia).

Lymphoedema

Fluid can build-up in tissues causing swelling.

Changes to sexual function and fertility

In women, pelvic radiotherapy can cause a narrowing and shortening of the vagina. You will be advised to use a vaginal dilator 2 or 3 times a week for up

to a year or longer after treatment. This will help to maintain the opening of the vagina, which can make future clinical examinations and intercourse more comfortable for you.

Radiotherapy may also cause some vaginal dryness. A lubricating gel may be recommended or prescribed to help.

In women, radiation treatment to the pelvis can result in infertility and an early menopause. Please speak to your doctor if you have any concerns about this.

In men, the ability to get an erection may be affected due to the effect of radiotherapy on the nerves and blood vessels that supply the penis. Men may also experience a loss of libido, a change in ejaculate (reduced amount or dry) and be unable to produce viable sperm (infertility). Your doctor will be able to advise you about treatments that can help with some of these side effects.

When infertility does occur, it is often not immediate and you will need to use contraception during and after treatment (your doctor will give you advice about this).

Changes in bone density

This can happen in women as a result of a premature menopause. Weight bearing exercise and a calcium enriched diet can help to avoid this. It may be necessary to have a bone density scan.

Second malignancy

There is a very small risk of developing a second cancer in the area treated in the years after treatment.

Please discuss any new symptoms you experience after your treatment with your consultant in the follow up clinic.

Contact the Macmillan information and support radiographer on 024 7696 7290, or your clinical nurse specialist if:

you develop new symptoms after your treatment is over.

- you are concerned that the immediate side effects are not getting better.
- you'd like more information.

There are booklets giving detailed information about potential side effects available form Macmillan Cancer Support.

Treatment Reviews

You may be booked in for a 'treatment review' at some point during your treatment. This review can be with a review radiographer, a doctor, or your colorectal specialist nurse. At this review we'll discuss:

- any side effects that you may be experiencing as a result of your treatment.
- any side effects that may happen as the treatment continues.

At these reviews it is not usually possible to give you any information on how effective the treatment has been so far. This is for 2 reasons:

- Although we take pictures of the treatment area during your radiotherapy, these are to check the position of the treatment field. They are not detailed enough to show us how well the treatment is working.
- There is a delay in the way that radiotherapy works. So, the effects of treatment can't be assessed until a number of weeks after the treatment has finished.

After treatment:

The early side effects from the treatment will continue for several weeks after the treatment is complete. You'll receive an appointment to see your consultant 6 - 8 weeks after finishing treatment. If you haven't received an appointment within 3 weeks of completing treatment, contact radiotherapy reception on 024 7696 7272.

If you have any problems with your radiotherapy treatment, contact the Macmillan information and support radiographer on **024 7696 7290**.

Where is the Arden Centre?

The Arden Centre is part of University Hospital Coventry. The entrance to the Arden Centre is situated to the left of the main hospital entrance. Please ask staff or visit the Hospital website for up-to-date maps and directions: 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

It can be very difficult to park at busy times, so please allow extra time. There are several visitor car parks across the site. There are also drop-off points near the Arden Centre and the main entrance. These allow 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 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.

You are entitled to free parking whilst on radiotherapy treatment.

You will need to give your registration number to the Arden Centre receptionist on arrival. If you don't know your registration number, make a note of it or take a photo of the number plate.

Please note that free parking does not include:

- clinic appointments
- counselling appointments

Public transport

Many bus routes stop at the hospital. Buses drive onto the site and stop close to the main entrance. For more information about bus services visit the Transport for West Midlands website: https://www.tfwm.org.uk/

Hospital transport

Hospital transport is available for radiotherapy treatment, where there is a medical need. It is not available for your CT planning scan or blood tests. It is not available for social or financial reasons.

You may not be entitled to access hospital transport if you:

- receive Disability Living Allowance Mobility Component, or
- have a vehicle under the mobility scheme.

If you need hospital transport and think 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)

HTG UK Leicestershire and Rutland Ambulance Service

0345 2413012

Worcestershire Acute Trust Transport Service:

0300 0110017

In most cases you will not be able to bring anyone with you. Your transport will be booked to get you to the hospital for your appointment time, but this cannot be guaranteed. You will be treated as soon as possible after you arrive.

Patients will often have to wait at the Arden Centre to be taken home for some time. This is due to the demand on the hospital transport service. We advise that patients make their own travel arrangements where possible.

If you are relying on the hospital transport service, bring food, drinks and any medication you may need with you. There is a refreshment kiosk available to buy snacks and drinks which is open from 10am - 4pm.

Transport schemes

Volunteer transport schemes are operating in some areas. These schemes may charge a mileage rate which varies. For more information, please ask to speak to the Macmillan information and support radiographers.

Prescriptions

All cancer patients are entitled to free prescriptions. If you need an exemption card, please ask a member of staff about how to apply.

Appointments

The department is usually open Monday to Friday, 9am – 5pm. It's closed at weekends and on public holidays.

You will be given a written appointment schedule on the first date of your treatment. Please check these dates. Notify your treatment radiographers as soon as possible if you need to change any dates or times. We'll try our best to give you the times you prefer, but this cannot be guaranteed.

If you are having chemotherapy alongside radiotherapy, we will try to manage appointments appropriately.

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

There may be breaks in treatment due to public holidays and machine maintenance. We may ask some patients to come in on these days for treatment. A different treatment machine could be used.

It is not advisable for you to miss any other appointments. If this is unavoidable, please talk to the radiographers treating you.

We need to have a contact telephone number for you. We may have to call patients about appointments or with other information at short notice. If your telephone is set to stop incoming calls from withheld numbers, please give us a different telephone number.

Counselling

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

Useful telephone numbers:

Arden cancer centre reception:

024 7696 7272

Monday- Friday 9am to 5pm

Acute Oncology (24-hour emergency advice)

024 7696 4105

Macmillan radiotherapy specialist:

024 7696 7290

Monday – Friday 9am to 5pm

Radiotherapy Planning team:

024 7696 7493

Information and Support

Cancer Information Centre 024 7696 6052

We can offer free support, practical advice and information to anyone affected by cancer. No appointments are required and an answering machine facility is available. The Centre is located on the ground floor in the main entrance.

Open Monday to Friday 9am to 4pm

Macmillan Cancer Support: 0808 808 0000

www.macmillan.org.uk

Cancer Research UK:

www.cancerresearchuk.org

NHS advice: use the 111 service

Patient Satisfaction

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

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

Written by Julia Biggs & Michelle Evans (Macmillan information and support radiographers)

With help and advice from the medical staff of the Arden Cancer Centre, University Hospitals Coventry and Warwickshire NHS Trust, Coventry CV2 2DX

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

This Trust operates a smoke free policy. Help to stop smoking can be obtained from your local NHS Stop Smoking Service: 0300 123 1044 or the hospital's stop smoking service 024 7696 4760.

Did we get it right?

We would like you to tell us what you think about our services. This helps us make further improvements and recognise members of staff who provide a good service.

Have your say. Scan the QR code or visit: www.uhcw.nhs.uk/feedback



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