

Arden Cancer Centre

Radiotherapy information for patients undergoing treatment for gynaecological cancer

What is radiotherapy?

Radiotherapy uses 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 carefully plan radiotherapy to protect as much healthy tissue as possible and reduce these side effects. The tissues usually heal, and side effects and symptoms improve over time.

There are 2 types of radiotherapy used to treat gynaecological cancers.

- **External beam radiotherapy** – this is given externally using a machine called a linear accelerator (Linac).
- **Brachytherapy** - this is given internally using a machine called an HDR Selectron Unit.

Many patients will have both types of treatment.

This leaflet describes external beam radiotherapy. There is a separate leaflet about brachytherapy treatment.

Radiotherapy is delivered by highly trained staff called therapeutic radiographers.



Patient Information

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

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

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're 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 will 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 needed 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

In order to treat you accurately and reduce side effects, your radiotherapy treatment must be carefully planned. This will involve having two CT scans, one immediately after the other, in the Radiotherapy Department. The first is done with a full bladder. You will then be asked to go to the toilet to empty your bladder, after which a second scan will then be done.

For the CT scan and later treatments, you will need 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 for each of your radiotherapy treatments.

There may then be a gap of 2 to 4 weeks before your treatment starts. During this time, doctors, physics staff and radiographers will prepare your treatment.

Skin marks

At the CT scan, you'll have felt tip pen marks put onto 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 must keep felt tip pen marks on your skin for all your treatment.

Contrast

Sometimes an intravenous contrast medium is used. This helps the radiographers, doctors, and physics team to see organs more clearly on the CT scan. This will involve putting a needle into your arm during the CT scan. You'll 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 the doctor or the radiographers know. Contrast is only needed for treatment planning and not for daily radiotherapy.

Bowel and bladder preparation

You need to have empty bowels and a comfortably full bladder for your CT planning scan and for all your radiotherapy treatment appointments.

This can help to reduce the side effects to the bladder and rectum. If the bladder isn't full or the rectum isn't empty, or if there is excess gas/wind in the bowel, it may make treatment planning more difficult, and we may need to repeat your CT planning scan.

If this happens during treatment, you may be asked to get off the treatment couch before having treatment. This is to fill the bladder or empty the bowel enough to make sure that treatment is given accurately.

We advise:

Every day for 1- 2 weeks before your CT planning scan:

- Make sure you drink 2-3 litres (4 to 6 pints) of fluid a day. Eat a well-balanced diet.
- If you have excess wind in your bowel, this will show on your CT planning and treatment scans. Monitor food and drinks that give you wind, but don't reduce them yet.

3-4 days before your scan:

- If you usually take laxatives, continue to do so.

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- If your bowels do not open daily or open later in the day, try a laxative. Discuss this with your pharmacist or GP or call the Macmillan radiotherapy specialist on 024 7696 7290.

2 days before your CT planning scan and during treatment:

- If you have been prescribed micro-enemas, start using 1 enema per day.
- Reduce green leafy vegetables and fizzy drinks to minimise wind.
- Avoid any other food or drink you've noticed gives you wind. But do not cut out fibre entirely.
- It's important to eat regularly and not skip meals.
- Continue to drink 2-3 litres of fluid daily.

On the day of your scan and for each treatment:

- Open your bowels if you can.
- Eat breakfast and, if your appointment is in the afternoon, have a light lunch. Not eating to achieve an empty bowel will cause more wind.
- If you have been prescribed micro-enemas, use 1 enema 1-2 hours before your scan and treatment.
- 1 hour before your appointment, empty your bladder. Then drink 300mls of water (1/2 pint) straight away. Try not to empty your bladder again until your appointment is completed.

When you arrive at the Arden Centre

- If you need to empty your bladder before your scan, have another drink to refill and note the time.
- If you think you could pass some wind or open your bowels, try to do this before your scan. If you empty your bladder at the same time, have another drink to refill.

Further advice is available for patients having problems with wind, constipation, or diarrhoea.

You may get a telephone call to discuss bladder and bowel preparation. If you have not received this one week before your CT planning scan and

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have any concerns, please contact the Macmillan radiotherapy specialist radiographer on 024 7696 7290.

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 get a slight headache if you usually have a lot of caffeine.

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

Treatment

Radiographers will deliver the treatment as prescribed by your consultant. To do this, you will need to fill your bladder and have an empty bowel in the same way you did for your first CT planning scan. The radiographers will ask you to remove any clothing from the treatment area. You will be positioned on the treatment couch in the same way you were when your treatment was planned.

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'll need to lie quite still, but you can breathe normally.

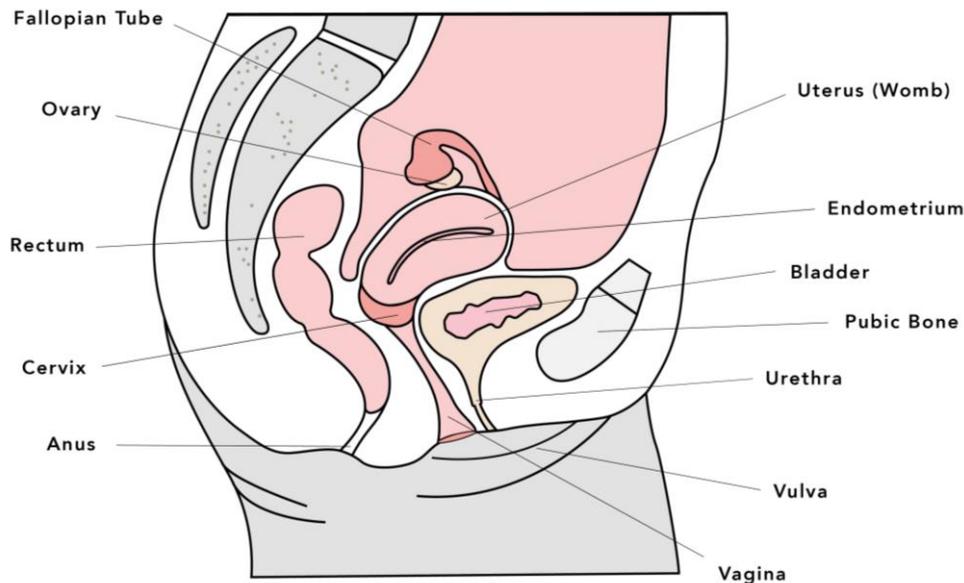
During treatment, the machine will move around you, but nothing will touch you. You will not feel anything during the treatment. The machine will make a buzzing noise.

The treatment times are very short. Images will be taken beforehand to check that the treatment is correct before it is given. The radiographers watch you all of the time on a monitor and will turn the machine off and enter the room if you move or call for assistance.

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

Side effects of treatment

Female Pelvis



Treating a small amount of healthy tissue is unavoidable when treating cancers in the pelvis. For this reason, radiotherapy has some unwanted side effects.

Research is going on all the time to make the treatment as effective as possible to reduce the risk of these side effects. Side effects can be thought of as early (acute) and late (chronic) effects.

Early effects:

These effects happen during your treatment and for several weeks after treatment finishes.

Effects on the bladder:

- An increased frequency of urination (peeing)
- Not able to hold your urine for as long as usual (urgency or in some cases incontinence)
- A burning sensation when passing urine

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- Blood in your urine
- Stinging on passing urine.

We advise you to:

- Drink plenty of fluids, 2-3 litres a day
- Avoid drinks that can irritate the bladder such as tea, green tea, coffee and alcohol. Caffeine-free alternatives are better but should still be drunk in moderation
- Drink plenty of water or squash
- Please tell the radiographers treating you if you think you may have a urinary infection.

Effects on the bowel:

- A bloated and tender feeling in your tummy/cramping
- An increase in the number of bowel movements
- Loose stools, urgency and diarrhoea
- Occasionally, bleeding from the rectum (back passage)

We advise you to:

- Eat a normal, well-balanced diet and drink plenty of fluids
- Avoid food and drink that give you wind
- If your bowels are loose, we may advise you to change your diet
- We can arrange for you to see a dietitian whilst you attend for treatment
- Sometimes drugs such as loperamide (Imodium) are needed to control diarrhoea

Effects on the skin:

- Radiotherapy may cause a skin reaction like exposure to the sun in the area treated
- Towards the end of treatment, the skin may become red, dry and itchy
- Sometimes moist patches develop in your groins or any skin folds, such as under your tummy. Some patients having the vagina or vulval area

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treated can get quite sore around these areas. All patients are reviewed on treatment to help manage these effects.

We advise that you:

- Wash the treated area daily with your usual soap or shower gel and pat your skin dry with a soft towel.
- Apply your usual skin moisturiser on the treatment area two or three times a day. Gently smooth it onto your skin until it is absorbed. Do not apply just before your 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.
- Wear loose-fitting clothing next to the skin (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 have to 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.

Swimming

You may continue to swim 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.

Other effects

- **Tiredness** or fatigue. Most patients having radiotherapy will get some fatigue. If you feel tired, try to rest as much as you can. Research has found gentle exercise, such as a short daily walk, may help the symptoms of tiredness and fatigue.
- **Nausea (feeling sick)**. Let the radiographers know if this is a problem. Anti-sickness tablets can be prescribed. Eating light meals and drinking plenty of fluids can help.

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- **Vaginal discharge.** Some women may experience a discharge from the vagina which may be bloody. Please tell the radiographers treating you if this happens.
- **Hair loss** can happen in the treatment area. You may lose some pubic hair. It will grow back but may be thinner.

Late effects

These may happen **months to years** after completing treatment. These may include:

Vaginal dryness and narrowing

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 dryness. A lubricating gel may be recommended or prescribed to help.

Swollen legs

In some people, one or both legs can become swollen (lymphoedema). This is more likely to happen in women who have had both surgery and radiotherapy to the lymph nodes. There is about a 5% - 20% risk of this. Your doctor should be able to give you information about this and how to manage it.

Bladder changes

This can include frequency, reduced bladder capacity, leakage, and blood in the urine.

Bowel changes

This can include loose bowel motions, urgency, narrowing of the bowel and bleeding from the rectum.

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Menopausal symptoms

Having pelvic radiotherapy can stop the ovaries from working. This induces menopause in women who have not already gone through it. Menopausal symptoms can be challenging - see the Macmillan booklet, "Understanding pelvic radiotherapy" for more information.

The menopause results in infertility and sterility. There is also an increased risk of osteoporosis (loss of bone density) due to early menopause.

Hormone replacement therapy may be recommended for some patients. Please speak to your consultant for more information.

Pelvic insufficiency fractures

There is a small risk of radiotherapy affecting the bones of the pelvis. This causes them to become weak, and pelvic insufficiency fractures may develop. These are fine hair-line cracks in the bones of the pelvis.

Secondary cancer

There is a very small risk (about 1-2% at 10-year follow-up) of a secondary cancer developing in the treatment area in the years after your radiotherapy.

Fistulae

Very rarely (1-2% risk), a bladder or bowel and vagina fistulae can develop. This condition is where when an abnormal connection forms between two organs that are not usually connected. This causes the leakage of faeces or urine. This may also be because of recurrent cancers.

These long-term changes can be irreversible and may need investigation and management. Very rarely, if complications become severe, surgical referral and intervention will be considered. We would expect the risk of severe late effects to be less than 2% (i.e. 2 in 100 people). Risks will vary with the type of cancer, the extent, and the type of treatment.

Contact the Macmillan Radiotherapy Specialist on 024 7696 7290 if:

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- you develop new symptoms after your treatment is over
- you are concerned that the immediate side effects are not clearing up

There is often a simple explanation for these symptoms. They do not always mean you will develop the late effects of treatment.

Treatment reviews

You may be booked in for a 'treatment review' at some point during your treatment. This review can be with either a review radiographer or a doctor.

At this review, we'll discuss:

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

At these review sessions, it's not usually possible to give you any information on how effective the treatment has been so far. This is for two 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. The effects of treatment can't be assessed until a number of weeks after the treatment has finished.

After treatment

The side effects will continue for several weeks after the treatment is complete. You'll receive an appointment to see your consultant 6-8 weeks after you finish treatment. At this appointment, your doctor will assess how well you are recovering from treatment and your response to treatment. This may be face-to-face or by phone, so check your letter carefully.

If you have any questions or worries once your treatment has finished, you can contact the Macmillan radiotherapy specialist on 024 7696 7290. If your call is urgent, please contact your GP.

Sexual relationships

Intercourse may not be possible for a few weeks after your treatment as your vagina may be inflamed. Some narrowing of the vagina can happen after radiotherapy. We advise you to use vaginal dilators to make intercourse more comfortable. These will be discussed with you.

Using a lubricant when intercourse resumes can ease vaginal dryness. If you have not received your dilators from your GP after treatment has finished, please contact us 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 visit the University Hospital website for up-to-date maps and directions: www.uhcv.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 outside the Arden Centre and near the main 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 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.

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However, 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, we suggest you make a note of it or take a photo of the number plate. Please note that free parking does not include clinic appointments.

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.**

Hospital transport

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

You may not be entitled to 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'll 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

0300 0110017

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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 rely on the hospital transport service, bring food, drinks and any medication you may need. The refreshment kiosk in the Arden Centre is currently closed due to COVID-19 restrictions. This may reopen in the future.

Transport schemes

Volunteer transport schemes are 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.

Prescriptions

All cancer patients are entitled to free prescriptions. If you need an exemption card, please ask a member of staff for an application form.

Appointments

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

On the first day of treatment, you will be given a written appointment schedule. Please check these dates and notify your treatment radiographers if you need to change any dates or times as soon as possible.

Every effort will be made to give you times that you prefer, but with a heavy workload this cannot be guaranteed. If you are having chemotherapy alongside radiotherapy we will try to manage appointments appropriately.

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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.

There may be breaks in treatment due to public holidays and machine maintenance. However, some patients may be asked to come in for treatment on these days, when a different treatment machine may 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.

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 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:

Reception, Arden Cancer Centre: **024 7696 7272**

Monday – Friday, 9am to 5pm

Macmillan Radiotherapy Specialist: **024 7696 7290**

Monday – Friday, 9am to 5pm

Radiotherapy Planning: **024 7696 7493**

Acute Oncology (24-hour emergency advice only) 024 7696 4000

Ask for Bleep 1641

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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.

You may find these Macmillan Information booklets useful:

Understanding Chemotherapy

Understanding Radiotherapy

Understanding Pelvic Radiotherapy

Managing the Bladder Late Effects of Pelvic Radiotherapy

Managing the Bowel Late Effects of Pelvic Radiotherapy

Macmillan Cancer Support National helpline: 0808 808 00 00

www.macmillan.org.uk

NHS 111

Cancer Research UK: 0300 123 1022

www.cancerresearchuk.org

Jo's Cervical Cancer Trust: 0808 802 8000

www.jostrust.org.uk

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.

Patient Information

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.

Written by Alison Crichton & Julia Biggs (Macmillan Radiotherapy Specialists). 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, we will do our best to meet your needs. Please contact Alison Crichton or Julia Biggs on 024 7696 7290.

This Trust operates a smoke-free policy. Help to stop smoking can be obtained from your local NHS Stop Smoking Service: 0300 123 1044

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.uhcv.nhs.uk/feedback



Document History

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