

## Arden Cancer Centre

# Radiotherapy Information for Patients Undergoing Treatment for Gynaecological Cancer

## What is Radiotherapy?

Radiotherapy is the use of high energy radiation to kill cancer cells in the area being treated. Radiotherapy can also damage normal cells in the treatment area which can cause some side effects, but radiotherapy is planned very carefully to shield as much healthy tissue as possible in order to reduce these side effects. The tissues usually heal, with an improvement in side effects and symptoms over time

There are 2 types of radiotherapy used to treat gynaecological cancers. External beam radiotherapy is given externally using a machine called a Linear Accelerator (Linac). Brachytherapy is given internally using a machine called a HDR Selectron Unit. Many patients will have both types of treatment. If you are to have brachytherapy treatment you will be given a separate booklet. This booklet describes external beam radiotherapy.

Radiotherapy is delivered by highly trained staff called Therapeutic Radiographers.

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.

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 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 and that you agree to go ahead with treatment.

### **Pacemakers**

**If you have a pacemaker or implantable defibrillator, please mention this to your doctor and the radiographers before your first treatment as the performance of your device can be altered by the treatment and it may need testing before and after 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.

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. It is usually necessary 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 your tumour and calculation of how to deliver the correct dose of radiation to it.

### **CT Planning Scan**

In order 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 and then a gap of three to four weeks before

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your treatment starts, during which time doctors, physics staff and radiographers are planning your treatment.

For the CT scan and subsequent treatment, you will be required to remove the clothing over your pelvis. Every effort will be made to keep you covered where possible. Gowns are available if you need one. You will be carefully positioned on the CT couch by the radiographers, lying 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.

## Skin Marks

At the scan, felt tip pen marks will be put on to your skin; these marks are used as reference for the planning process and during treatment. With your permission, we can put tiny permanent dots of dye just beneath the skin which will not wash off called tattoos. If we are unable to 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 to help 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 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.

## Bowel and bladder preparation

**You will need to have an empty rectum 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 and the treatment itself more difficult. It may mean that we have to repeat your CT planning scan. Once you start treatment it may mean that you are asked to get off the treatment couch before having treatment to fill the bladder or empty the bowel sufficiently to make sure that the treatment is given accurately.

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

- Make sure you are drinking 2-3 litres (4 to 6 pints) of fluid a day and eat a well-balanced diet.
- If you have excess wind in the bowel this will show on your CT planning scan and treatment scans – therefore MONITOR food and drinks that give you wind but don't reduce them just yet.

### **3-4 days before your scan:**

- If you normally take laxatives then continue to do so.
- If your bowels do not open daily, or tend to be open later in the day, try a laxative (you can discuss this with your pharmacist or GP or call the Macmillan Radiotherapy Specialist on the number below).

### **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 which you have noticed gives you wind, but do not cut out fibre entirely.
- It is 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 are able.
- Eat breakfast and if your appointment is in the afternoon also have a light lunch. Not eating in order 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 time empty your bladder and then drink 300mls of water (1/2 pint) straight away. Try not to empty your bladder again until your appointment is completed.

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### On arrival 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 feel that you could pass some wind or open your bowels try to do this before your scan, if you have emptied 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 receive a telephone call to discuss bladder and bowel preparation further. If you have not received this one week before your CT planning scan and have any concerns, please contact the Macmillan Radiotherapy Specialist Radiographer: 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 find that you get a slight headache initially if you normally have a lot of caffeine.

Pelvic floor exercises may help to hold your urine for longer but 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 rectum in the same way you did for your CT planning scan. The radiographers will ask you to remove any clothing from the treatment area and you will be positioned on the treatment couch in the same way as when your treatment was planned.

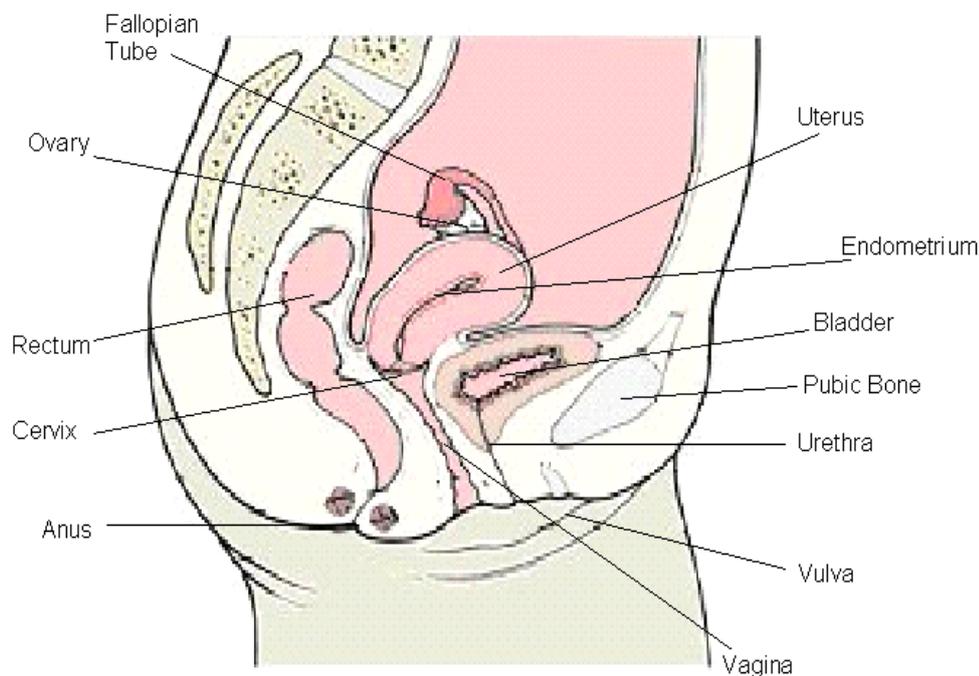
The radiographers will dim the room lights and use laser lights to line up your tattoos. When you and the machine are in the correct position, the radiographers will leave the room to switch the machine on. You will need to lie quite still but can breathe normally. The treatment machine will move around you during treatment but nothing will touch you. You will not feel anything during the treatment but the machine will make a buzzing noise.

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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 and you are safe to be near pregnant women and children.**

## Female Pelvis



**Diagram showing Uterus, Ovaries, Vagina, Vulva and Cervix**

## Side effects of treatment

When treating female cancers in the pelvis, treating a small amount of healthy tissue is unavoidable. For this reason, radiotherapy can often have some unwanted side effects.

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

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### **Early effects:**

These effects occur during your treatment and for several weeks after treatment has finished.

### **Effects on the bladder:**

- An increase in 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
- 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
- An increase in the number of bowel movements
- Loose stools, urgency and diarrhoea
- Occasionally bleeding from the back passage.

### **We advise you to:**

- Eat a normal well balanced diet
- Avoid food and drink that give you wind
- If your bowels are loose we may advise you to change your diet

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- If required we can arrange for you to see a dietitian whilst you are attending for treatment.
- Sometimes drugs such as loperamide (Imodium) are needed to control diarrhoea

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

- Radiotherapy may cause a skin reaction similar to exposure to the sun in the area treated
- Towards the end of treatment the skin may become red and / or dry and itchy
- Sometimes moist patches develop, particularly in your groins or any skin folds such as under your tummy. Some patients who are having the vagina or vulval area treated can get quite sore around these areas. All patients will be reviewed on treatment to help you manage these effects as they occur.

### **We advise that you:**

- Wash 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, otherwise 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 then 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.

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### Swimming

You may continue to swim if your skin is not blistered or peeling, providing that you wash the treatment area before and afterwards and apply moisturiser. Care should be taken as 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 that 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 as anti-sickness tablets can be prescribed. Eating light meals and drinking plenty of fluids can help.
- **Vaginal discharge**. Some women may experience a discharge from the front passage (vagina) which may be bloody. Please tell the radiographers treating you if this happens.
- **Hair loss** can occur in the treatment area, so you may lose some pubic hair. It will grow back but may be thinner.

### Late effects

These may occur **months to years** after completion of treatment and 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 to help to reduce this and 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 so a lubricating gel may be recommended or prescribed to help.
- Swollen legs - in some people, one or both of the legs can become swollen (lymphoedema). This is more likely to occur 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 it can be managed.

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- Bladder changes - can include frequency, reduced bladder capacity, leakage and blood in the urine.
- Bowel changes - can include loose bowel motions, urgency, narrowing of the bowel and bleeding from the rectum.
- Radiotherapy to the pelvis will induce menopause in premenopausal women resulting in infertility and sterility. There is also an increased risk of osteoporosis due to early menopause. Hormone replacement therapy may be recommended, please speak to your consultant for more information.
- There is a small risk of radiotherapy affecting the bones of the pelvis causing them to become weak, with the possibility of fine hair-line cracks developing called pelvic insufficiency fractures
- 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.

**Very rarely (1-2% risk)** a bladder and /or bowel and vagina fistulae can develop. This condition arises when an abnormal connection forms between two organs that are not normally connected, causing leakage of faeces or urine. This may also be as a result of recurrent cancers.

**These long-term changes can be irreversible and may need investigation and management. Very rarely, if complications become sufficiently severe, surgical referral and intervention has to be considered. We would expect the risk of severe late effects, warranting surgery, 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.**

There is a booklet giving detailed information about potential side effects entitled "Managing the Late effects of Pelvic Radiotherapy in Women", which is produced by Macmillan Cancer Support. Please ask your doctor or radiographer if you would like a copy.

If you develop new symptoms after your treatment is over, or you are concerned that the immediate side effects are not clearing up, you can contact the Macmillan Radiotherapy Specialist on 024 7696 7290.

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

### Treatment reviews

At some point during your treatment you may be booked in for a 'treatment review'. This review can be with either a review radiographer or a doctor. The aim of this review is to discuss any side effects that you may be experiencing as a result of your treatment, and any side effects that may occur as the treatment continues.

It is not usually possible to give you any information on how effective the treatment so far has been, at these review sessions for two reasons:

- Firstly, although we take pictures of the treatment area during your radiotherapy, they are to check the position of the treatment field and are not detailed enough to show us how well the treatment is working.
- Secondly, 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 side effects from the treatment will continue for several weeks after the treatment course has been completed. After finishing your treatment you will receive an appointment to see your consultant around 6 to 8 weeks later to assess how well you are recovering from treatment and the response to treatment.

If you have any queries or concerns once your treatment has finished you can contact the Macmillan Radiotherapy Specialist on 024 7696 7290 .If your call is urgent, please contact your own G.P.

### 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 occur after radiotherapy, so we advise you to use the vaginal dilators that will be discussed with you, to make intercourse more comfortable. Using a

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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 the above number.

## 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 web site for up to date maps and directions: [www.uhcv.nhs.uk](http://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.

**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, complementary therapy and counselling appointments, all of which must be paid for.**

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### **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 see the transport for west midlands web site: <https://www.tfwm.org.uk/>**

### **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**

0300 0110017

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

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service, please make sure 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.

## 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. 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.

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.

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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

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- maybe unavailable due to COVID19 restrictions

Aromatherapy, massage, Indian head massage, reiki, reflexology and yoga are available to cancer patients. Therapists are volunteers and provide their services to patients free of charge.

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

## Useful telephone numbers:

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

Mon – Fri 9am to 5pm

Radiotherapy Ward 35: **024 7696 5528**

Ask to speak to the Nurse in Charge – 24 hours

Macmillan Radiotherapy Specialist: **024 7696 7290**

Monday – Friday 9.00am to 5.00pm

Radiotherapy Planning: **024 7696 7493**

## Information and Support

**Cancer Information Centre** 024 7696 6052

## Patient Information

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. Open Monday to Friday 9.00am to 4.00pm, the Centre is located on the ground floor of the main entrance.

### **You may find these Macmillan Information booklets useful:**

Understanding Chemotherapy

Understanding Radiotherapy

Pelvic Radiotherapy in Women – Managing side effects during treatment

Managing the Late effects of Pelvic Radiotherapy in Women

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

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

### **NHS 111**

**Cancer Research UK:** 0300 123 1022

[www.cancerresearchuk.org](http://www.cancerresearchuk.org)

**Jo's Cervical Cancer Trust:** 0808 802 8000

[www.jostrust.org.uk](http://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.

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)

## Patient Information

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

To give feedback on this leaflet please email [feedback@uhcw.nhs.uk](mailto:feedback@uhcw.nhs.uk)

### Document History

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