

## Arden Cancer Centre

# Radiotherapy information for patients having intra-uterine brachytherapy (with anaesthesia)

### What is brachytherapy?

Brachytherapy is radiotherapy treatment that is delivered inside the body close to the tumour site. This will usually follow external beam radiotherapy.

To do this, a doctor will insert some special brachytherapy applicators through your vagina and into your womb. This is done whilst you are under anaesthetic. To deliver the treatment, a radioactive material (usually iridium) is placed inside the applicators and then withdrawn from the applicators once treatment is given. The applicators are then removed.

At the Arden Cancer Centre, we have a high dose rate (HDR) brachytherapy machine which is used to deliver the treatment.

### 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, and that you agree to go ahead with treatment.



## Patient Information

You will also be asked to fill in separate consent forms to agree to the anaesthetic and the positioning of the applicators. This is done with your consultant before you finish your external beam radiotherapy.

At this meeting, your consultant may inform you that they will also be inserting some very thin tubes through the applicators, which are referred to as needles. These very thin tubes give extra places to put the radioactive source, to help your doctor best shape the radiotherapy dose to your anatomy. This is called interstitial brachytherapy.

Please tell us if you have any allergies, including a latex allergy.

## Preparation for treatment

You will be given an anaesthetic so that you don't feel any pain when the applicators are inserted into your womb. Most patients have a spinal anaesthetic. A spinal anaesthetic is when a small amount of local anaesthetic is injected into the fluid surrounding your spine. This temporarily 'freezes' the nerves and make your lower body and legs numb in order to undergo the brachytherapy procedure. Rarely, a general anaesthetic may be used.

In preparation for an anaesthetic, you need some tests before the end of your external beam radiotherapy treatment - this is known as a pre-operative assessment and is carried out in the outpatient department by a nurse. These tests may include blood tests, E.C.G. (heart monitoring) and a nasal swab. Some patients may also need to see an anaesthetist at this stage. Your doctor and the Macmillan radiotherapy specialists will discuss this with you and arrange for an appointment to be sent to you.

You will also need an MRI scan towards the end of your external beam radiotherapy treatment, before the brachytherapy, which will be arranged for you.

Before your admission to the ward for brachytherapy, you will need to have a PCR test for Covid-19. This will be arranged by the radiographers and you will be informed of this appointment.

## Patient Information

If your bowels are not open daily prior to admission, we recommend the use of laxatives. This will be discussed with you towards the end of your external beam treatment.

You will usually be admitted to the Oncology Ward 35 the afternoon before your treatment takes place, and will stay on the ward for the duration of the brachytherapy. We have summarised a **typical** brachytherapy schedule in the table below. Please note, on occasion this may be different, and the brachytherapy radiographer or your doctor will discuss this with you individually.

Monday	Admission to ward. Blood tests. Pregnancy test. No food from midnight. Clear fluids only after midnight.
Tuesday morning	Theatre. Applicators inserted under anaesthetic. MRI / CT scans.
Tuesday afternoon / evening	Treatment. Applicators removed.
Wednesday	No treatment. Must remain in hospital. No food from midnight. Clear fluids only after midnight.
Thursday morning	Theatre. Applicators inserted under anaesthetic. MRI / CT scans.
Thursday afternoon / evening	Treatment. Sleep with applicators in overnight.
Friday morning	CT scan.
Friday afternoon	Treatment. Applicators removed. Discharge home.

## Patient Information

When you come into hospital before the procedure, more blood tests will be done and an anaesthetist may visit you on the ward to check that you are well enough to receive an anaesthetic. They will advise you about your medication and you may be given additional medications before you go to theatre. You may also be asked to take a pregnancy test if you are under the age of 55, as this is a requirement when having an anaesthetic.

On the morning of the anaesthetic it is important to restrict your food and drink. Continue to keep hydrated with sips of water until the theatre staff come to collect you. Please use the timetable below:

<b>Time before general anaesthesia</b>	<b>Fluid or food intake</b>
From midnight	No Solid food, milk, chewing gum. Please do not smoke.
Midnight to 6am	Clear fluids (black coffee/tea, squash, preoperative carbohydrate drink)
6am to surgery	Sips of water

**We recommend that you avoid eating baked beans, drinking fizzy drinks and any other food/drink that may cause you to have gas during your stay.**

### **What to bring into hospital**

Most patients find it helpful to bring something to read or watch during their stay. As you will be lying flat on your back for periods of time, it is useful to bring a water bottle with a sports lid on it.

Pyjamas, toiletries, mobile phone and charger, and non-perishable snacks/soft drinks (but no fizzy drinks) are also useful. You will be asked to **remove jewellery and piercings** before you go to theatre. Where possible, leave these at home and **remove any false nails**, varnish or gel from fingers before coming into hospital. Wedding rings can be covered up with tape on the day.

### Theatre procedure:

- On the day of your treatment, you will be taken to the hospital theatres at about 8.30am where you will be given an anaesthetic. The doctor inserts applicators, and needles if required, into the vagina, cervix and womb at this time. The number of applicators and needles used can vary. It normally takes about 45 – 60 minutes to do this.
- In theatre you will need to have a urinary tube (catheter) inserted into your bladder to drain your urine – this is because once the applicators are in place, you need to stay in bed and cannot walk around.
- After the procedure, you will be taken in your bed to recovery. Once you have been monitored by the recovery nurses for a short period, you will be taken for a CT scan and / or an MRI scan of your pelvis to check the position of the applicators, in order to plan your treatment.
- You are then taken back to the ward whilst your treatment is being planned and offered food and drinks. **You must stay in bed** during this time so that the applicators do not move from their position in the vagina. You will also need to lie quite flat with only one pillow.
- You may experience some pain or discomfort as the anaesthetic wears off. **Please ask the ward nurses for pain relief as often as you need it.**

### Treatment

Whilst you wait on the ward, your consultant plans the treatment with a physicist / dosimetrist - this can take several hours. When the treatment plan is ready (usually late afternoon / evening), you will be collected from the ward in your bed and taken to the brachytherapy treatment room in the Arden Cancer Centre.

Once in the treatment room, the applicators are connected to the brachytherapy treatment machine. The staff will leave the room and treatment will begin. The brachytherapy treatment team will be able to watch you at all times via a television monitor. Generally, treatment lasts between 5 and 20 minutes. You will not feel anything from the treatment itself. Please be aware that we have both male and female staff working in brachytherapy.

## Patient Information

When the treatment is complete, the applicators and the catheter will be removed straight away, unless you are keeping them in overnight (usually Thursdays). This only takes a few minutes, but can be uncomfortable/painful.

Additional pain relief is available in the form of Entonox gas (gas and air). There is often some bleeding from the vagina when the applicators are removed. Usually, this is only slight, but we will take you back to the ward on your bed and ask you to stay in bed for 30 minutes, by which time the bleeding should have reduced.

## Pressure sores

Because you will spend lots of time lying flat on your back for brachytherapy, there is an increased risk of developing a pressure sore on your sacrum/near to your buttocks. There are several ways to help reduce this risk:

- We will place a gel pad on your lower back when the brachytherapy applicators are inserted, to help prevent this happening/protect the skin if it is already sore
- We may put some cream/spray onto the skin
- We will try to make sure that your bed sheets are always dry – please inform the ward nurses if you feel wet
- When you don't have any applicators in place (Tuesday evening & Wednesday), you must keep mobile. Do not lie in bed – sit up in your chair. Try to sleep on your side if you can, and walk around where possible.

## Complications

Occasionally, during the insertion of the applicators in theatre, one of the applicators can go through the wall of the uterus - this is known as a perforation. The doctors may not know that this has happened until they look at the CT and MRI scans.

The perforation will heal itself in time and is unlikely to cause you any problems but it would be necessary for you to have antibiotics and to stay in the ward overnight.

## Patient Information

When a perforation occurs, it may be possible to continue with the brachytherapy treatment, but sometimes we are unable to give treatment that day and the applicators will be removed.

### **Will I feel sick?**

Nausea and vomiting are rarely a problem and are usually related to the anaesthetic. Anti-sickness medication will be prescribed if required. Eating light meals and drinking plenty of fluids should help.

### **Going home after treatment**

- You will need a friend or relative to take you home
- You will be discharged home from the ward when the nursing staff consider that you have recovered from the procedure
- If you have had a spinal anaesthetic, you will need a nurse present when you first get out of bed and stand up
- You may experience slight bleeding after the treatment. This usually stops after a few days. If you are concerned, please contact the Brachytherapy Radiographer, Macmillan Radiotherapy Specialists or the Ward (see numbers below).
- You may be given some tablets to take home with you in case you experience any diarrhoea.

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

Side effects are normally classed as acute (early) or long term (late). Please read these alongside your previous information for patients undergoing gynaecological radiotherapy.

#### **Acute side effects:**

- You may feel the need to pass urine more often than normal and this may be associated with a stinging sensation. If this continues, take a urine sample to your GP and drink plenty of fluids.
- You may experience episodes of diarrhoea, an urgent need to open your bowels and occasional rectal bleeding. Medication can be prescribed for you to help with the diarrhoea.

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- Vaginal dryness and soreness can also happen, along with some bleeding from the vagina. This will be assessed before you leave the hospital.
- Vaginal discharge is common. If this is excessive, see your GP or contact the Macmillan Radiotherapy Specialist on **024 7696 7290**
- Tiredness can be a common effect of radiotherapy. If you feel tired, you may need to rest, but evidence has shown that gentle exercise can help. More information on this is available from Macmillan Cancer Support.
- Lying flat on your back may have caused a patch of sore skin to develop near or on your buttocks, known as a pressure sore. This patch of skin may be painful – the nurses will provide you with cream to take home with you. It is important that you keep this patch of skin clean and dry and that you keep mobile.
- The above side effects should settle 4 to 6 weeks after the completion of your brachytherapy treatment.
- In young women with functioning ovaries, radiation treatment to the pelvis will result in infertility. This is because the treatment brings about an early menopause. However, **contraception in the form of a condom should be used for at least 3 months after the treatment.** You may need some Hormone Replacement Therapy (HRT) after treatment is complete. Your consultant will discuss this with you.

### Long term side effects:

These may occur months to years after completion of treatment and may include: -

- Vaginal narrowing - whether or not you are sexually active, you will be given a letter to take to your GP to get a pack of vaginal dilators prescribed. These are used to maintain the opening of the vagina, which makes future clinical examinations and sexual intercourse more comfortable for you.

This will be discussed with you in more detail when you come for treatment. If you have not received the letter or have any difficulties getting the dilators, please let the Macmillan Radiotherapy Specialist know.

- Vaginal dryness - you will need to use a vaginal lubricant when intercourse resumes and whilst using the vaginal dilators.

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- Bladder changes - can include frequency, reduced bladder capacity and blood in the urine.
- Bowel changes - can include diarrhoea, urgency, narrowing of the bowel and bleeding from the rectum.

**Very rarely**, bladder or bowel fistulae can develop - this is an abnormal opening between two adjacent organs that are not normally connected. There is about a 1% to 2% chance of this happening.

These long-term changes can be irreversible and **may** need investigation and management. Very rarely if complications become sufficiently severe, surgical referral and intervention will be considered.

There is a booklet giving detailed information about potential late side effects, entitled “Understanding pelvic radiotherapy” produced by Macmillan Cancer Support. Please ask your doctor or radiographer if you would like a copy.

## Follow up appointments

When your course of treatment is complete, you will have a follow-up telephone call from a radiographer 2 weeks after treatment.

You will also receive an appointment in an Outpatient clinic for about 6 weeks to see your doctor. This is to monitor your progress and response to the treatment, and for the management of any side effects that you may be experiencing. If you haven't received this within 3 weeks of completing treatment, please telephone the Arden Centre reception on 024 7696 7272.

If you have any problems before your follow up appointment, please contact the Brachytherapy Radiographer on 024 7696 7294 or Macmillan Radiotherapy Specialist on 024 7696 7290.

## Patient Information

### **Useful telephone numbers**

#### **Brachytherapy Information and advice:**

Monday – Friday 9am – 5pm

Brachytherapy Radiographer: **024 7696 7294**

Macmillan Radiotherapy Specialists: **024 7696 7290**

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

Radiotherapy Reception: **024 7696 7272**

**Oncology Ward 35: 024 7696 5525 or 024 7696 5528 or 024 7696 5531**  
(24 hour emergency advice only please)

### **Information and Support**

**The Cancer Information Centre** is situated on the Ground Floor, University Hospital in the main entrance.

The Centre is staffed by a Cancer Information Nurse 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

The Centre is open: Monday to Friday 9.00am to 4.00pm (excluding Bank Holidays)

National telephone number 0808 808 00 00

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

You may find these booklets from Macmillan Cancer Support useful:

- Understanding Radiotherapy
- Understanding Pelvic Radiotherapy

## Patient Information

### 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.

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.

The Trust operates a smoke free policy. For help to stop smoking contact UHCW smoking cessation on 0800 122 3780.

### 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](http://www.uhcw.nhs.uk/feedback)



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