



# Radiotherapy to the pelvis for gynaecological cancers

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**In the clinic today, you and your doctor have agreed that you are going to have radiotherapy treatment for your cancer. This leaflet explains what you can expect during and after your treatment and gives you some general advice and information.**

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## What happens next?

You will be given time to discuss any concerns with the radiographer (a person trained to give radiotherapy) at your first appointment.

The Berkshire Cancer Centre is a training centre, so you may meet radiography students who may be involved with the delivery of your treatment under close supervision.

## Planning treatment

We will contact you by telephone to arrange an appointment for the CT scan that forms part of the planning of your radiotherapy treatment. During this telephone call, please mention if:

- You have not had a blood test taken in the last 3 months as we may require you to take one prior to the planning scan date.
- You have been admitted into hospital since your last blood test was taken.
- You have a pacemaker or other implanted cardiac device, as radiotherapy can affect some types of cardiac devices.
- You have diabetes.
- You have any kidney problems.

If you have any questions regarding your CT scan appointment, then you can contact us on the number below, leaving a message on the answer phone if asked.

Telephone: **0118 322 7872** or email: [radiotherapy.planning@nhs.net](mailto:radiotherapy.planning@nhs.net)

Monday-Friday 8.30am-4.30pm

If you have any problems with travel or appointment times, please mention these when you are contacted about your planning scan appointment and we will do our best to help you. Please allow two hours for this planning appointment.

## What are the benefits of radiotherapy?

Radiotherapy works by using high energy X-rays to kill cancer cells. Our bodies consist of different cells and all cells have the ability to divide and grow. If radiation hits a cell that is dividing, it will be damaged. Unlike normal cells, cancer cells are much less able to repair the damage, meaning that more of them will be destroyed.

**When recommending radiotherapy, your doctor will have taken into account the risks and benefits of the treatment. Although there are risks and side effects, it is felt that the advantages for you outweigh the disadvantages.**

Depending on the nature of your illness, you will be prescribed between 25 and 28 treatments. You will get treatment daily and your oncologist (doctor specialising in cancer) will discuss with you the number of treatments that you need.

## Pregnancy

Patients with childbearing capacity **must not be pregnant or become pregnant at any time during a course of radiotherapy**, as radiation can be harmful to the unborn child. It is important to let the radiographers know if you have missed a period or suspect that you may be pregnant, before you are exposed to any radiation.

Patients with childbearing capacity will be asked to confirm their pregnancy status prior to planning the radiotherapy and again on the first day of radiotherapy treatment. This applies to all those with childbearing capacity between the ages of 10-56 years, and is a legal requirement.

## Patient identification

The hospital has a policy to ensure the correct patient is identified for their scan or treatment each time they attend an appointment. This will be done by our staff asking you to confirm your full name, your date of birth and the first line of your address. You may be asked this by different staff members, so please bear with us, but we take great care to ensure the correct patient identification checks are undertaken.

## Consent to treatment

After discussing your treatment options with you, your doctor will complete a consent form. We will ask you to sign this form once you have had some time to think about these treatments. Your signature confirms that you are willing to continue with this treatment plan.

## The areas being treated

This diagram may be useful to help you understand where your cancer is and the area to be treated with radiotherapy. Your doctor may draw on it to help explain your treatment.



*Female pelvis – side view*

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## Chemotherapy

Your doctor may recommend some chemotherapy as well as radiotherapy. Chemotherapy is the use of drugs to treat cancer, and to enhance the effects of radiotherapy. If your doctor feels you might benefit from this treatment, he or she will discuss this with you. The staff will give you a leaflet with specific information about the type of chemotherapy that you are going to have.

## Preparation for planning and radiotherapy

Where possible, we need to ensure that both your bowel and bladder are in the same position at the planning CT scan and each radiotherapy treatment. It is beneficial that you have a regular bowel movement before the planning CT scan and each day before your radiotherapy treatment. This will help reduce the build-up of gas inside your bowel, which can cause different amounts of rectal filling. We ask that you attend for the planning CT scan appointment having emptied your bowels if possible, although we caution against straining in order to achieve this. We also need you to be able to hold a comfortably full bladder for the CT scan and each of the treatment sessions.

Please contact us if you think you will struggle with holding your bladder or if you struggle to empty your bowels daily. You will be asked to empty your bladder upon arrival for your scan and then asked to drink a specific amount of water prior to your scan. We will then perform your scan approximately 30 minutes after you have finished drinking the water. This is to allow your bladder to fill and is an important process in planning your course of treatment and for your subsequent daily treatments. It is important that you are well hydrated in the days leading up to the CT scan and throughout the course of treatment. We advise patients to aim for 4-5 pints (2 litres) of fluid across the day, most of which should be water. We recommend that you do not drink more than a couple of cups of tea and coffee a day, and decaffeinated tea and coffee is preferable.

## CT scan – your planning appointment

Please allow up to two hours for the CT scan appointment.

When you arrive for your planning appointment, please report into the receptionist at the desk in the radiotherapy waiting room. They will tell you where to wait until a member of the radiotherapy team comes to call you in for your scan. Before the scan starts, one of the radiographers will explain what is going to happen and answer any questions.

### **If you have a pacemaker, you must notify the radiographers prior to treatment.**

You will be required to have a comfortably full bladder for this procedure; however, you will be told how and when to do this by the radiographers. **Tampons and menstrual cups must be removed prior to the CT scan and should not be used during the treatment course.**

During your CT scan, you will lie on the CT couch with your clothes removed from the waist down. You may feel a bit exposed, but we will provide you with medical underwear that is compatible with radiotherapy treatment or if you prefer we can cover you with tissue paper to maintain your dignity and it will only be your scanning team in the room with you. We will use knee rests and ankle stocks to support you in an exact but comfortable position. This will be replicated for your treatment every day.

## Marking out the treatment area

The planning radiographers will draw some temporary pen marks on your pelvis/ abdomen with a washable pen. Some markers are then placed on your skin, which will show up on the scan to aid us in planning your treatment. Measurements are taken to record the position of these marks, which will be used each time you come for your treatment. The radiographers will then leave the room to start the scan. During the scan you will move through the scanner; however, you will not see or feel anything. You can breathe normally throughout the scan. The scan will take approximately five minutes. It will not hurt but it is very important that you stay very still during the scan, while breathing in a relaxed manner. The radiographers are watching you throughout the whole procedure. Please note it is no longer required for our patients to have permanent marks (tattoos) for treatment.

At your CT scan, we will give you the date and time for your first treatment. This will be approximately 2-3 weeks after your CT scan, and you will be shown where to report in next time. During this time, we use your CT scan images to produce a computerised plan of your treatment, ensuring an even dose of radiation to the treatment area, while minimising the dose to surrounding tissues and organs – e.g. bladder. **There will not be any 'results' from the CT scan, it is used to help us plan your radiotherapy.**

## Contrast injection (dye)

The doctor may have requested that you have an injection of contrast for the scan. Not everyone will have this but for some patients it is helpful as it shows more detail.

You may have had an injection of contrast for scans before. It involves having a cannula, which is bendy tube, inserted into your arm or hand using a needle. The needle is only used to position the cannula and is removed once the cannula is in place. The cannula that is left in your vein is there to inject the contrast through. The radiographers will let you know when the injection is about to start.

The contrast injection may create a very warm feeling for about 20 seconds. This is often concentrated around the pelvis and groin area spreading down the thighs. It may also give you a metallic taste in your mouth. These are all common side effects and disappear quickly.

The cannula will be removed about 30 minutes after your CT scan is finished.

**If you have had an allergic reaction to contrast dye before, you must tell the radiographers before your scan.**

## Your first radiotherapy treatment

When you arrive for your treatment, please check in at Radiotherapy Reception and take a seat in the treatment waiting area. To park for free in the hospital car parks, please ensure you enter your car registration number in the tablet provided, next to the reception desk. While this entitles you to free parking, it does not guarantee a parking space. Parking availability can be very limited, so please leave plenty of time for parking.

On your first treatment, you will have a chat with a radiographer who will be treating you.

They will:

- Check your details.
- Give you a list of the first week's appointment times.
- Discuss the amount of water you need to drink before treatment every day.

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- Discuss the treatment procedure.
- Outline the potential side effects.
- Tell you which day your doctor/ review radiographer will see you during the treatment.
- Answer any questions you might have.
- Provide you with medical underwear if required.
- They will then ask you to empty your bladder and to drink the required amount of water.

## What happens during treatment?

Each time you attend the department for treatment, we need to ensure we are treating the correct person. As you enter one of the treatment areas, we will ask you to identify yourself by telling radiographers your name, date of birth and first line of your address. The staff will check this information against all your treatment information.

You will be positioned on the treatment couch, as you were for your planning scan, and you will need to have a full bladder for this and every subsequent treatment. Our treatment machines have a camera system attached that uses infrared lights to help us get you into the correct position and will also detect movement during the radiotherapy. You will need to remove your clothing from the waist down so that the camera system can map the surface of your pelvis and allow for accurate treatment. You may feel a bit exposed, but you will have on medical underwear or be covered with tissue paper to maintain your dignity, and it will only be your treatment team that is present with you. You will not feel anything from the infrared light and it will not affect or hurt your eyes so you can keep them open if you wish. **Please do let us know if you are light sensitive.**

All the measurements for your treatment will be set and checked. The machine will then move to the first treatment position. The radiographers then leave the room to deliver your treatment. This is so they are not exposed to too many high-energy x-rays, as they will treat many patients in one day. During the radiotherapy treatment, it is **very important you remain still**, breathing normally, as you did during CT scan.

During your treatment course, we will take x-ray images to confirm your treatment position. These are then repeated on subsequent treatment days as required. These x-ray images are used for position checking only. They do not show us how the treatment is working.

An additional check will also be carried out using a dose measurement device that is taped to your skin during one of your treatment sessions. This is done to confirm the dose given matches your treatment plan. This is a routine check and may be repeated on another of your treatment sessions. The radiographers check all the details of your treatment plan before going out of the treatment room as they operate the machine from outside of the treatment room. Although you are alone in the room, you will be monitored on a TV camera during your treatment. If you need a radiographer during the treatment, raise your hand clearly and a radiographer will stop the treatment and come into the room. You will not see or feel anything during the treatment but you will hear a buzzing noise as the treatment is delivered.

The total time of your first treatment will be around 20-30 minutes. Subsequent treatments should take between 10 and 15 minutes.

Once treatment has started, we aim to continue it without any breaks or days off, apart from the weekends.

However, we know that circumstances do sometimes arise where either you cannot come for treatment or for technical reasons, e.g. a machine breakdown, when we might not be able to deliver to the original schedule. If any treatments are missed, the radiographers will discuss with you how we will compensate for this.

This will not change the effectiveness of treatment and, in the event of repeated delays, you will be given more information.

If there are any short notice changes of appointments times, we ask for your understanding and patience while the staff works hard to rearrange your appointment.

Radiotherapy does not make you radioactive and it is perfectly safe for you to be with other people, including children, after treatment.

## After treatment

### Possible side effects

Side effects and their intensity will vary from patient to patient – everyone is different and reacts differently to treatment. It is important to let the radiographers know of any side effects that you experience.

Most side effects will gradually start from approximately two weeks into your course of treatment and may continue for 4-6 weeks after your treatment is completed.

- **Skin reaction:** You may experience a skin reaction on the area we are treating. This begins as a mild reaction similar to sunburn and may become dry and itchy. In some cases, the reaction may become more severe, similar to bright red sunburn. A reaction is quite likely in the natural skin folds, for example in the groin area.

To reduce the skin reaction, we advise that you:

- Apply a moisturising cream twice a day to moisturise the treatment area although you should avoid applying the cream one hour before your treatment. You should **avoid creams containing Sodium Lauryl Sulphate.**
- Only use non-perfumed soaps such as simple soap or baby soap in the treatment area.
- Towel dry the treatment area by patting not rubbing the skin, ideally, where possible, allow skin to dry naturally.
- Avoid applying hot or cold heat sources to the treatment area.
- Avoid exposing the treatment area to the sun.
- Try to keep loose, cotton clothing against your skin.
- Get as much air to the area as possible.
- Unless told by a Doctor, Swimming is ok while on treatment; although we ask that you seek advice if you notice a skin reaction developing.

If you experience any itching in the treatment area, please let the radiographer know and you will be referred to review radiographer for guidance.

You may find that you lose some of the hair in the area being treated. This usually grows back but sometimes hair loss can be permanent.

If you are experiencing soreness and discomfort, we advise that you avoid penetrative sexual intercourse until any problems or sensitivity in this area have passed.

If you experience any pain or discomfort, you can take painkillers, such as paracetamol, following the dosage instructions on the packaging. If the pain continues even though you are

taking regular painkillers, please discuss this with the radiographers, your oncologist or the clinical nurse specialists.

- **Tiredness:** Radiotherapy can make you feel tired, as can the anxiety and travelling for the treatment. The tiredness may start whilst you are having treatment and continue for a number of weeks after the treatment has finished. Many patients continue to work throughout their treatment but if tiredness becomes a problem, you may need to take time off work.

If necessary, you should allow extra time for a rest, for example an afternoon nap. If possible, spread your chores out over the week.

There is no reason why you should not continue with your usual daily activities if you feel able and many people find it beneficial to maintain gentle exercise each day throughout their course of radiotherapy.

Keeping hydrated by drinking 6-8 cups of water per day, limiting caffeine such as tea and coffee (or replace with decaffeinated versions) can also help to keep you alert.

- **Urinary symptoms:** During your treatment, the sensitive lining of your bladder may become irritated by the treatment. This may cause a burning feeling when you pass urine. You may need to pass urine more frequently and with a greater sense of urgency. This usually improves when you have finished your treatment. This can be helped by ensuring you increase your fluid intake but try to avoid excess tea, coffee and alcohol.

Some patients find that drinking cranberry juice and lemon barley helps to settle this irritation. If you are taking the drug Warfarin, avoid cranberry juice as it can have an effect on the drug. If the pain increases or you are unable to pass urine, you must tell the radiographers as soon as possible.

- **Changes in bowel habits:** Side effects will vary in different people. Some patients will start to have loose and watery stools (diarrhoea); they will pass more wind and have to open their bowels more urgently and frequently. This may mean that you have to rush to the toilet. It is not uncommon to pass a small amount of mucus or stool when passing wind. Some patients will have the opposite and find it difficult to go to have their bowels open (constipation). You may feel pain around your back passage or stomach, or feel that you have not emptied your bowels properly, resulting in straining. You may also pass some mucus or blood from the back passage. These symptoms may be caused by the radiotherapy affecting healthy cells, making them irritated, sore and inflamed. Please tell the review radiographers or contact your nurse specialist if you have these changes. They may recommend medicine and creams to help your symptoms.

If you feel bloated or have excessive wind, you may find it helpful to eat for 3 small easily digested meals each day with 2 or 3 snacks in between, as this will help in keeping your bowels regular. Keep hydrated by drinking 4-5 pints (2 litres) of fluids per day. Limit caffeine – such as tea and coffee (or drink decaffeinated versions).

Symptoms usually happen in the second or third week into treatment and will settle down a couple of weeks after the treatment has finished. Some patients find that the symptoms may continue and become permanent (see late side effects).

- **Nausea:** Very occasionally, you may feel sick during your radiotherapy treatments, your taste changes or you go off your food. This is more likely to happen if you are having chemotherapy. Let the nurses or doctors looking after you know because they can suggest things that may help.

## Late side effects

Radiotherapy can cause problems that become evident months or even years after treatment is complete; these are called 'late effects' and are difficult to predict. You should always report problems to your GP or hospital team for assessment and advice.

You may wish to read the Macmillan booklet 'Managing the late effects of pelvic radiotherapy', which is available from the Macmillan Information Centre in the Berkshire Cancer Centre or from your specialist nurse.

- **Vaginal side effects:** This treatment causes infertility, which is permanent and very likely to induce the menopause during the next 3 to 4 months after treatment in women who are still having regular periods. Your doctor may advise you to start hormone replacement therapy (HRT) if your symptoms are troublesome.

If infertility is an issue for you and your partner, please let the doctor who is planning your treatment know so that this can be discussed further with you. If appropriate, they can arrange for you to see a fertility specialist urgently.

Radiotherapy treatment can affect the vagina causing changes, these include vaginal scarring (fibrosis), shortening and tightening of the vaginal space (stenosis) and the walls of the vagina may stick together (adhesions). To prevent these occurring the radiographers will explain the use of vaginal dilators towards the end of treatment. We will give you an information sheet about this. Some long-term side effects that may occur less frequently are development of a small hole in the vaginal wall (fistula).

You must make sure you avoid using tampons or menstrual cups throughout your course of radiotherapy treatment.

- **Sexual relations:** During your treatment with radiotherapy you may find that you have a loss of libido, and have little or no desire for sexual intercourse. In addition vaginal dryness and narrowing can make penetrative sex feel uncomfortable. If you receive anal penetration, we suggest that you wait until any bowel problems or sensitivity in this area has passed. A course of radiotherapy is the equivalent of a major operation, and it may be some months before you feel interested in the physical aspect of your relationship and your vagina is fully healed and comfortable, however everybody is different and there is no need to avoid having sex if you wish to continue. Many women find that their vagina is a little dry and at first, it may be helped by using a vaginal moisturiser for day-to-day dryness and/or YES lubricant during intercourse or with a dilator. YES lubricant can be purchased online, ordered from pharmacies or available on prescription. If you notice any problems with intimacy or intercourse that last for weeks or months after treatment, please contact our Radiotherapy Sexual Care Team, as we would like to help you get back to your normal life-style. Sex is not harmful to you and will not make the cancer return. You can contact our Radiotherapy Sexual Care Team on 0118 3228869 or [sexualcareafterrrt@royalberkshire.nhs.uk](mailto:sexualcareafterrrt@royalberkshire.nhs.uk)

**The side effects from this treatment can feel embarrassing but please let your specialist or radiographers know, as often, simple treatments are available to help.**

- **Bowel late effects:** You might continue to feel an urge to empty your bowels more often or with more urgency. You may also feel the need to strain to pass a bowel movement and you may continue to pass a slimy mucus discharge or bleed from the back passage. These are often slight and although they may gradually improve over time.



Sometimes, scar tissue forms as the area is healing. If scar tissue affects the bowels, it can add to the problems of diarrhoea. Very rarely, this can lead to a narrowing or even a blockage in the bowel. An operation may be needed to remove this narrowed area, but this is a very rare problem.

- **Bladder late effects:** Occasionally, patients find they continue to need to pass urine more often due to the bladder wall becoming less stretchy. You may also find you get a small amount of blood in the urine due to fragile blood vessels in the bladder wall. Rarely, some patients may leak urine (bladder incontinence).
- **Lymphoedema:** This is swelling that develops because of a build-up of fluid in the body's tissues. Pelvic radiotherapy sometimes causes lymphoedema in the legs, pelvic area or genitals. This happens when the lymphatic system, which normally drains the fluid away, is not working properly. It is more likely to occur if you have had your pelvic lymph nodes treated. Lymphoedema can be managed and it is usually possible to reduce the swelling if it is diagnosed and treated early.

If you experience any of the above problems, contact your GP or hospital specialist for advice. Additionally, please ask your team of radiographers or your specialist nurse if you have any questions or concerns.

## Radiotherapy videos

The Trust has produced a set of useful videos explaining the process for people undergoing radiotherapy treatment. Visit <https://www.royalberkshire.nhs.uk/wards-and-services/radiotherapy-videos.htm>

## Contact details

Gynae Nurse Specialists:	0118 322 8195, Pager: 40600
Gynae Review Radiographer:	0118 322 8869
Berkshire Cancer Centre:	0118 322 7888 (9am-5pm)
Radiotherapy Clinic:	0118 322 7890 (9am-5pm)
Macmillan Cancer Information Centre:	0118 322 8700

## Further information

- Macmillan Cancer Support Tel: 0808 808 0000 [www.macmillan.org.uk](http://www.macmillan.org.uk)
- Hospital Patient Advice & Liaison (PALS) Team Tel: 0118 322 8338 or email [PALS@royalberkshire.nhs.uk](mailto:PALS@royalberkshire.nhs.uk)

To find out more about our Trust visit [www.royalberkshire.nhs.uk](http://www.royalberkshire.nhs.uk)

**Please ask if you need this information in another language or format.**

Lisa Revans: RBFT Gynaecological Review Radiographer, November 2024.  
Next review due: November 2026.