The Radiotherapy Department

Radiotherapy for cervix cancer
Information for women
There are a number of treatments that your doctor may use to treat your cervical cancer. These include radiotherapy, chemotherapy, brachytherapy and surgery. Occasionally, just one of these may be used, but more often a combination of them will be given.

Each treatment is planned individually and the doctor will explain which treatment(s) are recommended. They will explain how long the treatment course is likely to last, the benefits and risks associated with the treatment.

You have been given this leaflet as you have been recommended treatment with radiotherapy for cervical cancer. By giving you some idea of what to expect we hope to ease some of the worries you may have. Family members and friends may also find it helpful.

**What is radiotherapy?**

Radiotherapy is treatment using high energy X-rays. It is given by machines called linear accelerators (Linacs). The radiotherapy treatment is given in small daily doses called ‘fractions’. Everyone’s treatment is different and planned individually.

Radiotherapy causes changes in cells (normal and cancer cells). Cancer cells are more sensitive to radiotherapy than normal cells and so more of them are damaged. The normal cells are better able to repair themselves and so the damage to normal cells is usually only temporary.
Treatment planning appointment

You will need to come to a planning appointment before your radiotherapy starts. This will involve a visit to the radiotherapy department, where a therapy radiographer will fully explain the process with you and complete any paperwork needed. As part of the planning appointment you will also have a CT (computerised tomography) scan.

How do I prepare for the planning appointment?

We need to make sure that your internal organs are in the same position for each treatment. In order to do this, we will need you to carry out some preparation before the planning scan. The preparation will also need to be done before each of your treatments.

Bladder preparation

For a week before your appointment, increase your fluid intake so you are ‘well-hydrated’.

You will need to have a full bladder for the CT scan. The radiographer will ask you to drink 2-4 cups of water and wait 30 minutes before the scan. Please do not empty your bladder during this time.

Bowel preparation

You will need to have an empty back passage (rectum) for the scan. Try to empty your bowels on the morning of your scan, before your come for your appointment.

You will be given a micro enema at your planning appointment to use to empty your rectum. The radiographer will instruct you on how to use this. You will also need to do this daily before each radiotherapy treatment, even if you manage to empty your bowels before you come for the appointment.
Pregnancy test
If you are aged between 12 to 55 years old, and have not had a hysterectomy or been sterilised, you will be asked to take a urine pregnancy test.

It is important that you do not become pregnant at any time during your treatment, as radiotherapy can cause a miscarriage or cause a child to be born with abnormalities. If you think you may be pregnant at any time during your treatment it is extremely important that you tell a member of staff immediately.

CT scan
Radiotherapy is given very accurately, so needs to be carefully planned. To do this we need you to have a CT scan, which takes images of your pelvis. During the scan you will be given an injection of a special dye (contrast dye) that will help us see your organs and vessels more clearly. The doctor will use these images alongside other previous scans to identify the treatment area. The measurements we take are then used to make sure that you are in the same position for each treatment.

You will be asked to lie on a hard couch in the CT room. The radiographers will place specialised pillows under your head and legs, to support them in the correct position. They will make permanent tattoo marks on your skin, each the size of a full stop. These tattoos are used to place you in the correct position for treatment at each visit.

You may also have a PET (positron emission tomography) CT scan on the same day, in the X-ray department. You will be given an injection of a low-dose radioactive substance, which will help us to see your internal organs and any active disease more clearly. If you need to have this scan the X-ray department will contact you to give you further information.

You will probably need to spend a whole day at the hospital (up to 6 hours) for the treatment planning appointment if you also need to have a PET CT scan.
What happens next?

The doctor will use the information from the planning scans and all of your medical history to decide on the exact area for treatment. The radiotherapy planners will then produce an individual plan for you, which is approved by your doctor and then passed to the treatment radiographers. This process will be done between your planning and first treatment appointment.

Treatment appointments

How many treatments will I have?
The doctor will explain how many treatments (fractions) you are likely to have, but it is usually between 25 and 32. Your treatment is usually given as a series of daily appointments, from Monday to Friday. The radiographers will give you the treatment appointments at your planning appointment.

It is important that you come for every appointment. If you have any problems attending you must contact the department (please see contact details section at the end of the leaflet).

Do I need to prepare for the treatments?
You will need to follow the same bowel and bladder preparation as you did when you came for the treatment planning appointment.

What will happen when I have the radiotherapy treatment?
You will be collected from the waiting room and taken to the treatment room by a radiographer.

1. You will need to remove your lower clothing (trousers/skirt) and lie on the couch (you can keep your underwear on).

2. The radiographers will place a modesty cover over your pelvis and thighs and will move down your underwear to see the tattoo dots on your pelvis.
3. The room lights will be dimmed and the radiographers will move you, the couch and the treatment machine so that you are lying in the correct position, using lights and lasers to guide them.

4. Once you are into the correct position the radiographers will leave the room.

5. You will need to lie still and breathe normally. The radiographers will be watching you on cameras from outside the room. If you need them to come back in just raise your hand.

6. The radiographers will start your treatment. Each treatment will last a few minutes and the machine will make a buzzing noise when it is switched on. You will not see or feel anything during this time.

7. On some days the radiographers will take some X-ray pictures to check you are in the correct position.

It is important that you do not move or get off the couch until you are told that you can.

Are there any side effects?

You will not feel anything during the radiotherapy treatment; however it is quite usual for side effects to develop during your course of treatment.

**Bowels**

When radiotherapy affects your bowels it can cause:

- an increase in wind
- griping pains/cramping
- urgency to get to the toilet
- diarrhoea.

It is important to drink plenty of fluids and continue to eat your normal diet. When you develop changes in your bowels the radiographers will advise you on what medication you can take.
or whether to alter your diet. It is important to let us know if you are diabetic or have any chronic bowel conditions.

**Bladder**
Radiotherapy can irritate your bladder, which can cause:
- an increase in the number of times you need to go to the toilet
- urgency to empty your bladder
- a burning sensation similar to cystitis.

We recommend that you drink plenty of fluid and speak to a member of your treatment team if you experience any of these symptoms.

**Vagina**
Your vagina may become irritated, which can cause discomfort, such as inflammation, soreness and narrowing. You may notice an increase in vaginal discharge; please let the treatment team know if this is very heavy and/or has an offensive odour. Do not use tampons, feminine deodorisers, douches or talc, as they could cause discomfort and irritation and possibly encourage infection.

If you wish to, it is ok to continue with sexual intercourse.

**Tiredness**
You could feel quite tired or have less energy than usual, both during and after this treatment. This is completely normal. This is because your body is repairing the damage to your normal cells. Listen to your body and try to rest when you need to.

When possible, accept any offers of help from friends and family.

Please let the treatment team know if you are finding things difficult, as they may be able to offer you practical advice.

**Sickness/nausea**
Radiotherapy to the pelvis may make you feel sick (nauseous). If you feel sick, please let a member of your team know, so we can prescribe you medication to help relieve this.
Treating the abdomen and para-aortic nodes will cause you to feel sick (nausea). If you are having treatment to these areas you will be prescribed anti-sickness medication to take daily before treatment.

**Skin care/hair loss**

Radiotherapy may irritate your skin in the area we are treating. It can become red, dry and more sensitive, but it is only the skin around your pelvis (between your waist and the top of your legs) that you need to be slightly careful with. The rest of your body does not need special care.

Radiotherapy may also cause hair loss in this area, but this usually grows back.

It is usual for the skin reaction to begin two to three weeks after the beginning of radiotherapy treatment. It can last for a number of weeks after radiotherapy is complete.

Please refer to the General Radiotherapy leaflet, which will tell you how to care for your skin in this area and what things to avoid to help reduce skin irritation.

**Who can I discuss my side effects with?**

At your first treatment appointment the radiographers will go through the possible side effects with you. They will see you every day and will ask you how you are. You will also been seen in a weekly review clinic by a member of the treatment team. It is important to tell your treatment team if you are experiencing any side effects.
How long will the side effects last?

Usually the side effects will carry on or become worse for a short while after you have finished treatment, however they will settle down within a few weeks. Please do not worry, as this is quite normal. During this time you should continue to follow the advice you have been given during your treatment. Continue to use any prescribed medication for the side effects until they settle down.

What are the long-term side effects?

Long-term side effects can occur many months to years after radiotherapy has finished. These late side effects are hard to predict and unfortunately, if they do occur, they can be permanent. The doctor will discuss the possibility of these late effects with you at the time you sign your consent for treatment.

**Bowel and bladder**

1 in 5 women report some symptoms of late effects. The majority of these are minimal, with little or no impact on their lives. The effects of most of these symptoms may be controlled by a change in diet and/or regulating fluid intake.

1 in 20 women report side effects that may affect the quality of their life. These may include diarrhoea, cramping and bleeding.

Please report any bowel or bladder changes to your team, so that you can be assessed and referred for specialist advice if needed.

**Vagina**

When the vaginal tissues heal themselves after radiotherapy, small scars and adhesions (areas of tissue that become connected) can form. The muscles supporting the vagina can also become hardened, causing them to lose their flexibility. This may result in your vagina becoming ‘tighter’ and shorter. This can make vaginal examinations in follow-up clinics and sexual
intercourse more difficult and uncomfortable. You will be given vaginal dilators during your treatment, to help prevent the scars and adhesions forming and to keep your vagina as supple as possible.

The treatment can also affect the cells that produce the natural lubricant in your vagina. This can cause a ‘dry’ or unpleasant feeling, which can make sexual intercourse uncomfortable. This may be helped with the use of vaginal moisturiser and/or lubricant.

Small blood vessels can develop on the surface of the vagina, which can occasionally bleed. This may happen after using the dilators, intercourse or a vaginal examination. It is usually nothing to worry about, but if you have any concerns or unexpected bleeding please contact either your gynaecological oncology nurse practitioner or your family doctor.

You may find the Macmillan ‘Sexuality and Cancer’ booklet useful. Please ask a member of the treatment team for a copy.

**Ovaries (for pre-menopausal women)**

The radiotherapy will affect your ovaries and cause them to stop working. This is a permanent effect, which means you will become infertile (unable to become pregnant) and your body will go into the menopause. If you are still having periods, you may find they stop during your course of treatment or shortly after.

Menopausal symptoms vary from woman to woman. Symptoms include hot flushes, vaginal dryness, irritability and night sweats. You can discuss these symptoms with your doctor, who can refer you to a menopause specialist after the treatment has finished.

It is important that you tell your doctor if you want to have children, as they will arrange an urgent appointment with a fertility doctor before your treatment starts.
Lymph nodes
Radiotherapy, cancer cells and surgery can affect lymph nodes, causing them to become ‘blocked’. This means the lymph fluid in the body cannot drain, causing swelling or ‘lymphoedema’ in the legs or, very rarely, in the pelvis.

After having radiotherapy treatment, it is important to look after your legs, paying particular attention to any cuts, grazes or insect bites and using an antiseptic lotion to minimise the risk of infection. Use a moisturiser to help keep your skin healthy.

It is important to let your GP or oncologist know if you notice any swelling of your feet, legs or pelvic area after you have had radiotherapy.

Bones
Radiotherapy can affect the density of your bones. They can cause fine, hair-like cracks in the bone called ‘pelvic insufficiency fractures’. This may occur a few weeks to a few years after the radiotherapy treatment and can cause a dull, constant ache in the pelvis. The cracks can be treated with drugs, exercise and a diet rich in calcium.

Rarely, the pain may be severe and may require regular medication.

Let your doctor know if you experience any pain in your pelvis, as they will need to do further investigations.

Secondary cancer
Radiotherapy is associated with a small risk of causing another cancer many years later. For this reason, it is important that you come for your regular follow-up appointments and alert your doctor to any unexplained symptoms.

You will be given a Macmillan booklet ‘Managing the late effects of pelvic radiotherapy in women’, which contains further information.
Chemotherapy

If you are having chemotherapy as well as radiotherapy you will usually have 5 doses (cycles). This will be given once a week, alongside your course of your radiotherapy.

You will be reviewed by your treatment team before each cycle and you will also need to have weekly blood tests. This is to check that you are well enough to continue with next cycle of chemotherapy.

Example of your weekly schedule for chemotherapy during radiotherapy:

Day 1 (Monday)
Radiotherapy + blood test in the Outpatient department

Day 2 (Tuesday)
Radiotherapy + review in the Radiotherapy department

Day 3 (Wednesday)
Chemotherapy in Day Care Unit + radiotherapy (after chemotherapy)

Day 4 (Thursday)
Radiotherapy

Day 5 (Friday)
Radiotherapy

You will need to plan for spending more time in the hospital on the days when you need a blood test and review.

On the day of chemotherapy you will need to be at the hospital for the whole day. Please bring any medication that you need for the day, as well as maybe something to read or to do while you wait. You might also want to bring a drink and a snack or, if you have brought someone with you for company, they can leave the department to get refreshments.

The side effects of the chemotherapy are fully explained in the chemotherapy information leaflet, which you will be given when
the doctor explains your treatment plan with you. Please read this carefully.

If you are having chemotherapy, it is very important that you contact the Oxford triage assessment team immediately if:
• your temperature goes above 37.5°C (100.4°F)
• you suddenly feel unwell, even with a normal temperature
• you develop any bleeding.

Tel: 01865 572 192
(24 hours)

Follow-up arrangements

Telephone call
A radiographer will telephone you at home about two to three weeks after your course of radiotherapy is finished, to check your progress.

Hospital appointments
You will also have follow-up appointments at the hospital where you first saw your oncologist. The first of these will usually be four to six weeks after your last treatment. This appointment will be sent to you by post. It is at this appointment that your doctor will assess and discuss your progress, ask you about any continuing side effects and plan further appointments.

You will then be seen at regular intervals for the next five years. At these appointments the doctor will ask you questions about your general wellbeing and specifically about your bowel and bladder functions. They will feel your abdomen and do an internal examination. They will also discuss any future decisions about your care.

If you have any questions, remember to write them down and bring them to the appointment.
Will I have any scans or tests after the treatment has finished?

A scan may be done a few months after you complete your radiotherapy. It is not usually carried out straight away, as your body needs to recover from the treatment first. Your doctor will decide at future appointments whether any more scans or tests need to be done.

Who do I contact for advice once my treatment has finished?

Until your first follow-up appointment, please contact a member of the treatment team (as shown below) for routine advice and queries. For urgent enquires, contact your family doctor.

After your first follow-up appointment, please contact your gynaecological oncology nurse practitioner or your family doctor.

How to contact us

**During normal working hours:**
- Radiotherapy reception: 01865 235 465
- Consultant gynaecological radiographer: 01865 227 213
- Radiotherapy nurse practitioners: 01865 235 473

**Out of hours:**
- Oxford triage assessment team: 01865 572 192
If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALSJR@ouh.nhs.uk**

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