Radiotherapy before your operation for rectal cancer

Information for patients
This leaflet aims to help you and your family to understand more about your planned course of radiotherapy and its effects.

These effects vary from one person to another, so the information is given as a general guide. Not everyone will experience all of the effects described. If you have any questions after reading the booklet, please let us know.

Your doctor is a clinical oncologist, who is a specialist in radiotherapy. His/her team will be caring for you during your treatment. This team will include junior doctors, radiographers, nurses, and may include clinical nurse specialists, social workers, physiotherapists, occupational therapists and dietitians.

Staff will make every effort to meet your individual needs or will direct you to the person who can help.

Please do not bring any valuables into hospital with you as the Trust cannot accept liability for loss or theft.

All your radiotherapy planning and treatment will take place in the Radiotherapy Department on Level -2, Bexley Wing, Leeds Cancer Centre, St James’s Hospital (LS9 7TF)

Most cancers of the rectum are treated by surgery but in some cases we recommend a course of radiotherapy before your operation. The choice is made after considering a number of factors including the size and position of the tumour.
What is radiotherapy?

Radiotherapy is the use of high energy X-rays and other types of radiation, to treat cancer. The organs and tissues of the body are made up of tiny building blocks called cells. Radiotherapy causes physical and chemical damage to the cancer cells in the treated area.

Although normal cells are also affected, they can repair themselves and are able to recover. You do not feel anything with radiotherapy and it does not make you radioactive. It is perfectly safe for you to be with other people, including children, throughout your treatment.

You will have your radiotherapy on a treatment machine called a linear accelerator (shown in the photograph).

Radiotherapy is given by male and female therapy radiographers. You will see your radiographers at each treatment session and they will be happy to answer any questions you may have.

Treatment for each patient is planned individually, and even patients with the same type of cancer may not receive identical treatment.
If you would like to visit the radiotherapy department before your treatment starts please call 0113 206 7603 to arrange a time. This visit can be very useful as you can find out more about radiotherapy. It is a good opportunity to visit the department, to see where you will be treated, meet the staff and ask questions.

‘I was so pleased to see the machines before my treatment and the staff were so helpful and really put my mind at rest.’

Students
The radiotherapy department is a training centre for male and female radiographers. They are supervised at all times. If you do not wish students to be present please speak to a member of staff. This will not affect your treatment or care.

Contraception and pregnancy
It is important that women do not become pregnant while having cancer treatment because radiotherapy and chemotherapy can have an effect on the unborn child. It is suggested that you use a barrier form of contraception (e.g. condoms). For more information see the ‘Contraception and pregnancy during cancer treatment’ leaflet. Please do not hesitate to ask your doctor or nurse if you have any questions or concerns about these issues.
In men, radiotherapy can affect sperm production (both the quantity and quality). This can lead to increased rates of abnormality in children that are conceived during or after treatment. Men are therefore advised to use contraception for a year after treatment.

Planning your treatment

Your first radiotherapy appointment, after seeing your doctor in clinic, will be a planning scan. This scan will be used to gather all the information we need to accurately plan your treatment. You will be contacted by phone, with an appointment for your radiotherapy planning session. Directions to the hospital and transport arrangements will be discussed with you at this point.

You may see your clinical oncologist (or a member of their team) at this appointment. This is an ideal opportunity for you to ask questions. If you have not previously consented to your treatment you will be asked to sign a consent form.

What to bring with you

- a list of all questions you may have;
- an up-to-date list of all the medications you are taking (including inhalers, sprays, vitamins or herbal products);
- any medication that you may need during your visit;
- something to eat and drink and something to occupy yourself with as this first visit can be quite lengthy (up to two hours).
Your planning scan

In order to plan your treatment you will have a Planning CT scan. This allows the images to be sent to the radiotherapy computer planning system. This is done on a machine called a CT Simulator, shown here in the photograph.

You will need to undress and wear a gown for your planning scan. You will need to lie in this position for your scan and treatment. You will also need to drink before your scan and treatment; the radiographers will explain this to you when you arrive. There is no need to arrive with a full bladder.

The radiographers will draw some marks onto your skin, to be used as a reference for your treatment. You will then be scanned, which will only take a few minutes. At the end of the scan any skin marks will be replaced by permanent marks.

These permanent marks are no bigger than a freckle and will be used each day for your treatment. These marks are made using ink and a small needle to help us to reproduce your treatment with accuracy each day. It also means that you can wash as normal without worrying about your marks coming off.

Planning scans are not diagnostic examinations and will not be reported on as such.
Having your treatment

When you arrive for your treatment you should go to the reception at the entrance of the radiotherapy department. You will be given directions to your treatment machine. There, the radiographers will explain what will happen and answer any questions that you may have. The number of treatments you will be having will be confirmed and you will be given a list with all the appointments you need.

Treatment is normally given daily, Monday to Friday however your treatment may start on any day of the week. Whenever possible you will be treated at the time of day that suits you, but this cannot always be arranged or guaranteed. There may be occasions when you may have a longer stay in the department or be asked to attend at a different time, e.g. to see your oncologist.

Although you have the small permanent marks on your skin, the radiographers may need to draw around them each time you come for treatment. This is part of the quality checking procedure for your treatment. If you have pen marks on your skin you may prefer to wear older clothing as the marks may discolour fabric. It is also generally advisable to wear loose clothing around the treated area.
The radiographers will take images to check your treatment position before giving you your first radiotherapy treatment. Treatment will take about 10 minutes each day. The treatment machine is only switched on for a fraction of this time. For most of the time the radiographers are carefully placing you and the machine in the correct position for your treatment. The machine will move around you but does not touch you.

Once you are in the correct position the radiographers will leave the room to switch on the machine. You will only be alone for a few moments at a time. The radiographers will be watching you on a closed circuit TV monitor (CCTV) during treatment. The CCTV camera is not recording or saving any images.

There is also an intercom system so the radiographers can talk to you. Please let the radiographers know if you would like to use the intercom system.

Although you have to lie still, you can breathe normally during your treatment. The machine stops automatically after your prescribed dose of treatment has been given. The machine can also be stopped at any time if needed. The treatment machines make a buzzing sound when they are switched on. You do not feel anything.
During the treatment course, please tell the radiographers how you are feeling. If you have any problems or questions, please let them know.

**Side-effects**

Side-effects can be divided into short term effects that happen during or soon after treatment and long term effects which can occur months or years later. Some are common; others may be serious but very rare. Some people get more side-effects than others. Most people only get a few of those listed here.

If you experience any side-effects please inform a member of staff who is looking after you.

**Short term side-effects**

Radiotherapy causes inflammation, swelling and soreness of the lining of the bowel. You may experience mild diarrhoea, opening your bowels 2-3 times more than normal each day.

If you need to open your bowels four times or more than is usual for you in a day, then tell the radiographers, your doctor or a nurse.

You may notice some pain in your lower back or buttocks. Sometimes the pain can travel down the back of the legs. Usually this pain is mild and needs no treatment. On rare occasions you may need pain killers, and/or a slight modification of the radiotherapy (this will not affect how well your treatment works).

**It is important to tell the treatment team if you have any pain.**
Long term side-effects
Some long term side-effects are caused by your surgery and others by the radiotherapy. You may not experience all of these side-effects.

Side-effects of radiotherapy
Radiotherapy can make the risk of some of the surgical side-effects more likely, or slightly more severe.

Common side-effects
If you have a complete removal of your rectum (back passage) and anus, the wound in the bottom may be slower to heal after radiotherapy. This can also be a problem even if you do not have radiotherapy. If you have a permanent stoma then it may be more active than if you had not had radiotherapy. If you have surgery where the bowel is joined up again, there is an increased risk of opening your bowels more often during a 24 hour period. After surgery there is a risk of soiling or leakage occurring once per week or more. Radiotherapy can increase this risk.

Side-effects affecting women
If you have not gone through the menopause, radiotherapy is likely to induce the menopause and infertility (you will no longer be able to have children). You may notice your periods becoming irregular during or after treatment. If you have not completed your family please discuss this with your doctor before starting radiotherapy.

You may experience vaginal dryness and pain during intercourse. Your vagina may also become narrower following treatment. These side-effects can be reduced by using a dilator
(which we will give you), lubricating jelly or resuming sexual intercourse. A member of the team will discuss this with you and you can ask for our information booklet ‘Feminine care after pelvic radiotherapy’. We can also advise you about hormone replacement therapy if appropriate.

**Side-effects affecting men**

Radiotherapy can affect sperm production (both the quantity and quality). This can lead to increased rates of abnormality in children that are conceived during or after treatment. Men are therefore advised to use contraception for a year after treatment.

Patients who have not completed their family should discuss this with the doctor before starting radiotherapy so that we can arrange storage (freezing) of some sperm which can then be used at a later time if needed.

There is an increased risk of impotence (being unable to attain and maintain an erection) in patients who have received radiotherapy and surgery. If this is a problem you should discuss it with your GP or hospital team.

**Rare side-effects**

*These include:*

- Changes in how your bladder works (going to pass urine more often, passing urine at night or dribbling).
- Developing a new cancer is a very rare side-effect of radiotherapy.

These effects need to be balanced against the possible benefit of treatment.
Side-effects of surgery

Your surgeon will discuss your surgery with you. The type of surgery you have affects the long term side-effects you may develop. Your surgical team will be able to give you more information about this. Many people will have a stoma, this may be permanent or temporary, to allow the bowel to heal.

Long term side-effects from surgery include:

- Changes in your bowel habit, once the temporary stoma has been reversed. These changes can include opening your bowels more often (which is common), leakage or soiling (which is less common).
- Changes in how your bladder works.
- For men, impotence (being unable to get and maintain an erection).

Further information

If you have any further questions please discuss these with your hospital team. The following are also useful sources of information and support you may wish to use.

Useful organisations and contact numbers

Leeds Cancer Support

Leeds Cancer Support complements care provided by your clinical team. We offer access to information and a wide range of support, in a welcoming environment for you, your family and friends.

We can be found in the information lounges in Bexley Wing and also in the purpose built Robert Ogden Macmillan Centre.
**Information Lounge Level 1 Outpatients Department**

Open from 10am - 4pm. Tel: (0113) 206 8816

**Information Lounge Level -2 Radiotherapy Department**

Open from 8.00am - 6.00pm Tel: (0113) 206 7603

**The Sir Robert Ogden Macmillan Centre**

The Centre is on the St James’s Hospital site and offers a variety of support services including counselling, support groups and complementary therapies. You can just drop in for a coffee and a chat anytime.

Open from 10am - 4pm. Tel: (0113 206 6498)

All the above services for Leeds Cancer Support can be emailed on: **leedsthr.Cancersupport@nhs.net**

**Macmillan Cancer Support**

Freephone **0808 808 0000**, 9am to 6pm Monday to Friday

A textphone service for deaf and hard of hearing people on **18001 0808 808 0000**.

**website: www.macmillan.org.uk**
Bowel Cancer UK
Independent charity dedicated to raising awareness of bowel cancer and improving quality of life to those affected by the disease. Provides a lot of information and other links.

**Tel:** 020 7940 1760  
**email:** admin@bowelcanceruk.org.uk  
**website:** www.bowelcancer.org

Patient Advice and Liaison Service (PALS)
Supports patients and their families when they have concerns about the service they have received from the NHS.

**Tel:** 0113 206 7168  
**email:** patientexperience.leedsth@nhs.net

One You Leeds

**www.oneyouleeds.org.uk**  
**Tel:** 0800 169 4219

Smokefree

**www.smokefree.nhs.uk**  
**Free phone:** 0300 123 1044

Hospital Contact Numbers
Most queries during treatment can be addressed to the radiographers on your machine. If required, they will contact the medical team on your behalf.

For urgent problems out of hours, including weekends and Bank holidays, contact St. James’s University Hospital on **0113 243 3144** and ask for the oncology patient enquiries bleepholder.
Refreshments
There is a restaurant and coffee shop available on Level 0, which are open daily. They serve drinks, light snacks and hot meals. Vending machines are also available in the main radiotherapy waiting room and Level 0. There is also a shop on Level 0 with books, papers and snacks.

Car Parking
Parking for radiotherapy planning and treatment is free.

- On entering the car park take a ticket and park as usual (disabled parking spaces are on Level 0).
- When exiting the car park use the left hand lane next to the ticket office. Take your parking ticket and appointment letter to the attendant.
- They will process your ticket so that when you insert it at the barrier no charge will be made.
- If you need assistance or are unable to leave your car please press the button on the barrier.