

# Chemoradiation for rectal cancer

Patient Information Series PI 68



**NHS**  
East and North Hertfordshire  
NHS Trust



## Contacts

Your oncologist is Dr: .....

Your oncologist's secretary: .....

Your hospital number: .....

Your named nurse on the ward: .....

Gastrointestinal clinical nurse specialists: ....020 3826 2115  
Mon - Fri, 9am - 5pm

Radiotherapy Clinic Nurses..... 020 3826 2186  
Mon - Fri: 9am - 5pm

Radiotherapy clinic radiographers: ..... 020 3826 2612  
Mon - Fri, 9am - 5pm ..... or 07825 024058

Chemotherapy suite: ..... 020 3826 2236  
Mon - Fri: 8.00am - 6.00pm

Ward 11: ..... 020 3826 2041  
24 hr cover 7 days / week

**24 hour Acute Oncology Service**  
**Mount Vernon Cancer Centre: 07825 028855**

# Chemoradiation for rectal cancer

---

## Contents

|                                                       |    |
|-------------------------------------------------------|----|
| Contacts                                              | 2  |
| Introduction                                          | 4  |
| What is chemoradiation?                               | 4  |
| When is chemoradiation used?                          | 5  |
| How does it work?                                     | 5  |
| Why are chemotherapy and radiotherapy given together? | 5  |
| How is it given?                                      | 6  |
| Will it hurt?                                         | 6  |
| Where will I have my chemotherapy?                    | 6  |
| How long will my treatment last?                      | 7  |
| When will my treatment start?                         | 7  |
| What chemotherapy drugs will I receive?               | 8  |
| What are the possible side-effects?                   | 8  |
| What are the possible side-effects of chemotherapy?   | 9  |
| What are the possible side-effects of radiotherapy?   | 11 |
| How should I look after my skin?                      | 13 |
| What are the late effects of treatment?               | 14 |
| What happens after the treatment has finished?        | 15 |
| Will chemoradiation affect my sex life/fertility?     | 15 |
| How can this treatment affect my relationships?       | 16 |
| What about my work and leisure activities?            | 16 |
| What about nutrition and diet?                        | 17 |
| What about my other medicines?                        | 17 |
| Am I allowed any alcohol during treatment?            | 17 |
| What if I feel unwell during my treatment?            | 18 |
| Other help and support                                | 18 |
| If you normally pay for NHS prescriptions             | 18 |
| Consent                                               | 19 |
| Identification                                        | 19 |
| Pregnancy/fathering a child                           | 19 |

**Please read all of this leaflet before starting treatment**

## Introduction

Your specialist cancer doctor (oncologist<sup>1</sup>), has recommended that your cancer is treated with a course of chemoradiation at Mount Vernon Cancer Centre (MVCC).

This leaflet is a simple guide to chemoradiation. Although it does not deal with every issue, we hope it will answer some of your questions.

We also recommend that you read our leaflets:

PI01 - Radiotherapy at MVCC

PI02 - Chemotherapy at MVCC

If you have any further questions, please ask one of the team treating you. There are some contact telephone numbers on page 2 of this booklet.

## What is chemoradiation?

Chemoradiation involves giving two treatments together: chemotherapy and radiotherapy.

Chemotherapy is a form of drug treatment given to treat and control cancer cells.

Radiotherapy is the use of precise, accurately measured doses of radiation (x-ray beams) directed to a specific area to destroy cancer cells.

You could be seen by both male and/or female radiographers when you have your radiotherapy planning and treatment.

---

<sup>1</sup> In this leaflet the term 'oncologist' will refer both to your cancer specialist and any doctors working within his/her team

## **When is chemoradiation used?**

Prior to surgery, chemoradiation for rectal cancer is usually given to shrink the cancer. Recent research also suggests that it reduces the risk of the cancer coming back in the future.

For some patients where a curative operation is not possible, chemoradiation can be offered to manage the symptoms from the cancer.

## **How does it work?**

Chemotherapy drugs are used to kill cancer cells and bring the disease under control.

Individual drugs attack the cells in different ways: some break down parts of the cell and some disrupt the cell's growth cycle at different stages.

Chemotherapy is most effective against rapidly dividing cells such as cancer cells, but the drugs may also affect some normal healthy cells as well.

The effect on normal cells is usually temporary, as they have the ability to repair at a faster rate than cancer cells.

The type of radiotherapy used to treat cancer is external beam radiotherapy. This means that a course of radiotherapy is given at regular intervals using an external radiation beam.

Although radiation affects both cancer and normal cells, it has a greater effect on cancer cells.

## **Why are chemotherapy and radiotherapy given together?**

The chemotherapy increases the activity of the radiotherapy against the cancer cells; it is known as a 'radiosensitiser'.

## **How is it given?**

The chemotherapy is given by an injection directly into a vein, usually by an infusion (drip).

The chemotherapy will be given on the first and last week of your radiotherapy (week one and week five). It will be a continuous infusion for either one day as an outpatient or five days as an inpatient.

Another option is to have an oral tablet form of chemotherapy, which you would take twice a day for the duration of your radiotherapy. This would be as an outpatient and would not require a hospital admission.

The radiotherapy is given on a daily basis, Monday to Friday, on a special type of x-ray machine called a linear accelerator. The radiographers who operate these machines are specially trained professionals who are responsible for planning and delivering your treatment.

## **Will it hurt?**

The most uncomfortable part of administering the chemotherapy is usually the insertion of a cannula (a plastic tube that sits inside a vein).

The delivery of radiotherapy is completely painless. The radiation cannot be seen or felt while it is being given.

## **Where will I have my chemotherapy?**

This depends on whether you are receiving the oral chemotherapy or the intravenous chemotherapy (via a drip). The oral chemotherapy is given as tablets and does not require an inpatient stay.

Patients receiving the intravenous chemotherapy during week one and week five of their chemoradiation are admitted for either one day to the Chemotherapy Suite or for five days to Ward 11.

It is possible that if you become unwell during or after the course of your chemoradiation you may need another hospital admission.

## How long will my treatment last?

Chemoradiation for rectal cancer lasts for five weeks.

## When will my treatment start?

Your treatment will take about three weeks to arrange. It is planned carefully to ensure you receive the maximum benefit from the chemoradiation.

## How is my treatment planned?

### Chemotherapy

When you attend the clinic the nurses will measure your weight and height. This is to calculate the correct dose of chemotherapy for you. All chemotherapy drugs are made up individually and the dose is tailored for you.

### Radiotherapy

The first step for the radiotherapy is a planning CT scan. This is a special x-ray taken with you lying on your tummy, face down on a couch. Sometimes people are positioned lying on their back, the radiographers will discuss with you which is the best position for your treatment.

About 20 minutes before the scan, you will be asked to drink up to six cups of water, to ensure you have a full bladder during the scan.

You will be asked to undress from the waist down. Depending on the exact area that needs treating, you may be able to keep your underwear on. Your radiographers will advise you about this and will ensure your dignity is maintained by covering you up whenever possible.

You may be given an injection of some contrast into a vein during your scan.

**If you are diabetic** and taking Metformin, please call 020 3826 2622 as soon as possible. We may need to arrange for you to have a blood test before your planning appointment.

Marks will be placed on your skin using a felt-tip pen, however these marks will wash off. With your permission, the radiographers will make a few tiny permanent dots (tattoos) on your skin. These are very small and are done by pinpricking the skin with some special dye. The permanent dots are important as they enable accurate positioning and treatment delivery each day.

Before you leave the department you will be given a list of your treatment appointments.

## What chemotherapy drugs will I receive?

The drugs used for chemoradiation to treat cancer of the rectum are:

- Oxaliplatin
- Irinotecan
- 5FU
- Capecitabine

You will receive either one or more of these drugs. The oncologist will discuss this with you.

## What are the possible side-effects?

When given separately, both chemotherapy and radiotherapy have some side-effects (see the following sections). When given together it is likely that the side-effects will increase as they add together.

All of these side-effects are possible, but not all patients have them all. Some patients do not have any.

Please note that everyone is individual and therefore everyone reacts differently to chemoradiation. Please tell one of your treatment team if you are experiencing any side-effects.

## **What are the possible side-effects of chemotherapy?**

Chemotherapy can sometimes cause unpleasant side-effects, but it can also make you feel better by relieving the symptoms of the cancer.

You will be given an appointment to come to a pre-chemotherapy group consultation. At this appointment a chemotherapy nurse will give you all the information you will need about the chemotherapy you will be having.

Most people have some side-effects, but not usually all of those described here. They can usually be controlled with medication.

### **Lowered resistance to infection**

Chemotherapy can reduce the production of white blood cells by the bone marrow, making you more likely to get an infection. This effect can begin seven days after the start of your chemotherapy and it usually reaches its lowest point at 10 to 14 days. Your blood cells will then increase steadily and will have returned to normal before your next course is due.

If you feel unwell or have a temperature above 38°C please call the 24 hour Acute Oncology Service (see page 2) **as soon as possible.**

### **Bruising or bleeding**

The chemotherapy drugs can reduce the production of platelets. These help the blood to clot. Let your doctor know if you have any unexplained bruising or bleeding, such as nosebleeds, rashes on the skin or bleeding gums.

### **Anaemia (low number of red blood cells)**

Whilst having your treatment you may become anaemic. This may make you feel tired and breathless. In some cases, you may need to have a blood transfusion.

### **Hair loss**

If you are having Irinotecan you will experience hair loss, and your scalp may be a little tender or sore.

If you do experience hair loss, remember that for most patients this is only temporary and your hair should grow again when the drugs are stopped. During this time some patients like to wear a wig, hat or headscarf.

### **Feeling sick (nausea)**

It is possible you could feel sick, or you may even be sick. This can often be helped by taking regular anti-sickness drugs (anti-emetics) which your doctor can prescribe.

If the sickness continues let one of the team treating you know, so they can try another drug that may be more effective.

Some anti-sickness drugs can cause constipation; please let one of the team treating you know if this is a problem for you.

### **Mouth sores and ulcers**

The chemotherapy drugs can make your mouth dry, sore and cause small ulcers. If you have these side-effects please let your treatment team know so that they can prescribe the correct mouthwash for you.

It is important to use the mouthwash regularly and to pay attention to your oral hygiene.

### **Taste changes**

You may notice that your food and water tastes different. Normal tastes will usually return after your treatment has finished.

## **Diarrhoea**

You may have diarrhoea after having the chemotherapy drugs. This often starts several days after the chemotherapy.

If you are taking chemotherapy tablets at home it is important to tell your treatment team if you have diarrhoea more than four times a day, as your treatment may need to be stopped for a short period.

## **Soreness of the hands and feet**

Soreness of the hands and the soles of the feet can occur when 5FU or Capecitabine is given. It is known as palmar - plantar syndrome. Using a moisturiser may help relieve this. Please ask your chemotherapy nurse for further advice.

In severe cases, a dose reduction of the drug may be needed.

## **Tiredness and feeling weak**

Many people feel extremely tired during and after their treatment. This is a very common side-effect and it is important to allow yourself plenty of time to rest. Do accept any help offered by family and friends. For more information about how to cope with tiredness ask at the Lynda Jackson Macmillan Centre (details are at the end of this leaflet).

## **What are the possible side-effects of radiotherapy?**

Each patient is individual and reacts differently to radiotherapy.

Most people find that the side-effects become more noticeable as the treatment progresses.

### **Skin**

The skin in the treated area will be more sensitive and may become pink or red. This is most likely to happen in the folds of skin between the buttocks and in the groin. This tends to start a couple of weeks into treatment.

Some people develop an irritation or itch around the back passage (anus) and also for women the front passage (vagina) especially towards the end of treatment. Your doctor or clinic radiographer can prescribe cream if you experience this problem.

### **Tiredness**

You will begin to feel tired about two to three weeks into your course of treatment and this will last for several weeks after your treatment has finished. This is a very common side-effect and it is important to allow yourself plenty of time to rest. Let family and friends help you.

### **Bowels**

It is likely that you will experience an increase in frequency/urgency with diarrhoea after three to four weeks of treatment. This may be with colicky or wind pains. You will have medication given to you (for the diarrhoea) at the start of your treatment, to take as and when you need it.

If you have pain from the diarrhoea, please let the radiographers know so they can ask your doctor to prescribe some medication for you.

Some people notice a discharge of mucous from the back passage and there might be a little blood.

If you have had a colostomy you may find that, because the bowel moves more frequently, you may need to change your bag more often.

### **Rectum (back passage)**

You may develop the urge to frequently go to the toilet. You may already have had this sensation as a result of your tumour. However, as the treatment progresses, the back passage will become inflamed and you may feel the urge to go to the toilet more. You may feel like this even if you have a colostomy.

### **Passing water**

Sometimes the bladder becomes irritated and you may feel that you need to pass water more often and more urgently than usual. It is important to continue to drink plenty of fluids.

You may also have a burning sensation when passing urine. Drinking plenty of fluids will help, but let the radiographer know so we can check you do not have an infection.

### **Hair**

There will only be a loss of hair in the treated area. This is usually temporary, although in some patients hair may not re-grow.

### **Women**

The tissues of the vagina (front passage) will become inflamed by the treatment. You may develop a mild clear discharge. If you have a heavy or creamy coloured discharge (yellow, green or brown) you should let your doctor know. The vagina can also become dry, sore or irritated during the treatment; if this is the case please let the radiographers know.

During your treatment you will be reviewed by the clinic radiographer who will be able to give you advice and also discuss the use of dilators (these are used to help keep the vagina open after treatment).

All women receiving chemoradiation should read another patient information leaflet in conjunction with this called 'Advice for women following radiotherapy to the pelvis' PI30. Please ask the doctor, nurse or clinic radiographer looking after you if you have not yet received one.

### **How should I look after my skin?**

You may bath and shower during your treatment using your normal skin care products. Ensure the water is lukewarm and not hot and pat your skin dry with a soft towel.

Deodorant may be used unless you find it irritates your skin. Don't use talcum powder on the treatment area.

You may find that you will be more comfortable if you wear loose fitting clothes, preferably with cotton next to your skin.

If your skin does become red and sore during the chemoradiation, we can prescribe some creams that will help soothe it. Please ask a member of the team treating you. Only use the creams that have been prescribed. However soothing other creams may seem, they may interact with your treatment and cause the skin to become worse.

### **What are the late effects of treatment?**

If you have an operation after the chemoradiation, the treatment may slow down the healing process of any surgical wound in the treated area. However, it should heal fully with time.

Your bowel habit may not return to normal after treatment. If you have an operation after your chemoradiation, it will add to this effect.

Sometimes medication may be needed to regulate your bowels on a longer-term basis.

Serious problems are very rare. Some scar tissue may develop in several areas. Sometimes it can affect the wall of the bladder and very rarely this can cause shrinkage of the bladder. This can cause irritation on passing water and make it difficult to 'hold on', leading to an urgent need to get to the toilet.

If such 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. This is a very rare problem.

## What happens after the treatment has finished?

Most symptoms that develop due to the treatment will gradually settle down. However, for many patients the tiredness can take many weeks to go away. Your doctor will arrange to see you about six weeks after your treatment has finished.

## Will chemoradiation affect my sex life/fertility?

### Libido (sexual urge or desire)

As a result of the side-effects of chemoradiation, many patients find that their interest in sex goes down. This usually returns when the treatment has finished and the side-effects have settled down.

### Sexual function

After your treatment there is a chance of a loss of sexual function. This may occur as a result of radiotherapy or surgery, or as a combined effect of both.

Women who are still having periods before radiotherapy will go through the menopause due to the effects the radiotherapy has on their ovaries.

Women may also initially notice some vaginal dryness. If this continues to be a long-term problem you should discuss this with your doctor or nurse, as help and advice is available.

Men may find it difficult to get an erection due to damage to some of the pelvic nerves. Help and advice is available so please let your doctor or nurse know if this becomes an issue.

### Fertility

Your ability to become pregnant or to father a child may be affected by this treatment. It is important to discuss this with your doctor before starting treatment if it is an issue for you.

### ○ Men

It is likely you will become infertile as a result of the radiotherapy. If this is a concern we can refer you to specialists who offer the facility to store sperm before treatment starts.

### ○ Women

It is likely you will become infertile as a result of the effects of radiotherapy on your ovaries. Please speak with your doctor if you have any concerns before you start your treatment.

### Contraception

You are advised not to become pregnant or to father a child while undergoing this treatment, as it may harm the developing foetus. It is important to use effective contraception during and for one year after treatment.

We strongly suggest you discuss this in further detail with your doctor.

## How can this treatment affect my relationships?

It is important to recognise that your emotions and worries may also affect any difficulties you may have in your intimate relationships. This is quite common for many patients having this treatment.

Staff are available who can help you talk through any issues. Please let us know if you would like further support.

## What about my work and leisure activities?

Some patients find that they can manage to do some work around their treatment schedule. It is important to plan your work and activities around how you feel.



It is likely you will be able to do some work early in your treatment, but as you go through your treatment you will probably find it harder to concentrate and stay alert for long periods of time.

You should continue with any leisure activities depending on how you are feeling. You are the best judge of what you can manage.

### **What about nutrition and diet?**

It is important that your body gets proper nourishment so that you can cope with the demands of the treatment. You are advised to eat a well-balanced, sensible diet.

If you need more information, ask your specialist nurse or doctor. They may refer you to a dietitian.

The Lynda Jackson Macmillan Centre has information on nutrition and diet.

### **What about my other medicines?**

It is usually fine for you to continue taking your current medication.

Please bring a list of all your medications with you when you come to clinic, so that your doctor can review them and check that they are ok to take while on treatment. This includes any vitamins, herbal medicines and 'over the counter' preparations as they may interact with your treatment.

### **Am I allowed any alcohol during treatment?**

Usually it is quite safe for you to have a glass of alcohol such as wine or beer (but avoid spirits) during your treatment.

There are some drugs that can interact with alcoholic drinks; your doctor will advise you about this.

### **What if I feel unwell during my treatment?**

If you have any of the following please contact one of the numbers on page 2 as soon as possible:

- any sign of infection such as serious cough, breathlessness, raised temperature (above 38° degrees Celsius)
- bruising easily or bleeding

### **Other help and support**

The Lynda Jackson Macmillan Centre (LJMC) offers information and support to patients and their families and is located next to Chemotherapy Suite by Gate 3. The staff at the LJMC work as part of the overall team caring for you.

People who have cancer often say that during their illness they experience a range of emotions. Many find it to be a stressful, anxious and confusing time. Please feel free to drop in before, during and after any of your visits to Mount Vernon Cancer Centre to find out more about the LJMC services that you may find helpful.

The volunteers and healthcare professionals at the LJMC provide help, support and information in a relaxed setting to help patients cope with cancer and its treatment.

LJMC services include a range of complementary therapies, counselling, relaxation sessions and financial advice. You can drop in without an appointment or call the LJMC helpline on 020 3826 2555. More information is on the back of this leaflet.

#### **If you normally pay for NHS prescriptions**

People undergoing treatment for cancer do not have to pay NHS prescription charges if they have a valid medical exemption certificate. To get an exemption certificate, ask your GP for an application form.

## Consent

It is a legal requirement to have a signed consent form from you before the start of your treatment.

If you have already been given one of these forms, please bring the completed form with you when you come for your first appointment.

If you have not been given a form, this will be discussed with you at your first appointment.

## Identification

Please note that it is a legal requirement for the staff to check your name and details against your treatment sheet every time you attend.

## Pregnancy/fathering a child

Female patients must not be pregnant or become pregnant and male patients must not father a child during a course of radiotherapy or for some months afterwards. **Please discuss this with your cancer specialist.**

If you think there is a chance, however small, of you or your partner being pregnant during treatment, it is extremely important that you discuss this with your oncologist, radiographer or nurse as soon as possible.

Female patients will be asked to confirm their pregnancy status prior to radiotherapy. This applies to all women between the ages of 12 - 55 years. This is a legal requirement.

This publication has been produced by the Information team at the Lynda Jackson Macmillan Centre. Contributors include professionals, patients and carers from Mount Vernon Cancer Centre who have expertise and experience in the topics covered by this publication. All our publications are reviewed and updated regularly. If you would like any details of the references used to write this information please contact the LJMC on 020 3826 2555.

**Lynda Jackson**   
Macmillan Centre



# Lynda Jackson Macmillan Centre

*... supporting people affected by cancer...*

- ① Drop-in centre for support and information
- ① Telephone helpline
- ① Complementary therapies\*
- ① Counselling\*
- ① Benefits advice\*
- ① Relaxation classes
- ① Look Good...Feel Better™ beauty workshops
- ① The Way Ahead headwear workshops
- ① Self-help courses

The **Lynda Jackson Macmillan Centre** is situated between the Cancer Centre and Gate 3 (White Hill)

Please drop in or call to find out how we may be able to help you

Opening hours: **Monday–Friday: 9.30am–4.30pm**

Mount Vernon Cancer Centre, Northwood, Middlesex HA6 2RN

Telephone Helpline: **020 3826 2555**

Website: **www.ljmc.org**

\* Service only available to NHS patients under the care of an oncologist based at Mount Vernon Cancer Centre



© LJMC 2017

PI68 [yellow] published 06/17 (amended 11/17)  
review date 06/19