

Long Course, Pre-Operative Chemotherapy and Radiotherapy for Bowel Cancer

**Pan Birmingham
Cancer Network**

Patient Information 

Introduction

This leaflet tells you about long course, pre-operative chemotherapy and radiotherapy for the treatment of bowel cancer. It explains what is involved, and some of the common complications that you need to be aware of. It is not meant to replace discussion between you and your surgeon, but as a guide to be used in connection to what is discussed.

What is radiotherapy?

Radiotherapy treatment involves the use of exact and carefully measured doses of radiation and aims to destroy cancer cells. Although healthy cells are also damaged during treatment, they usually repair themselves more effectively.

What is chemotherapy?

Chemotherapy treatment consists of a number of chemical agents that are designed to either kill cancer cells or make them less active.

The type of chemotherapy given as part of your treatment will depend on where you are treated. Your treatment will either be a chemotherapy called:

- 5- fluorouracil ('5FU'), given intravenously (via injection into a vein)
- Capecitabine, given by mouth, in tablet form.

The aim of this chemotherapy is to make the radiotherapy more effective.

What are the benefits of pre-operative chemotherapy and radiotherapy treatment?

A long course of chemotherapy and radiotherapy has been recommended for you. The aim of this treatment is to reduce the size of your cancer and, as a result, surgery to remove it is often made possible.

For some patients, particularly those who have a lot of symptoms, a stoma is recommended before treatment begins. The formation of a stoma involves an operation to bring out a part of the bowel to the surface of the tummy. If this operation is necessary then arrangements will be made for you to see a colorectal surgeon and a colorectal nurse specialist who will counsel you for this and offer you written information.

What are the risks of not having pre-operative treatment?

Not having this treatment will make surgery to remove all of your cancer very difficult, indeed there is a possibility that some of your cancer will be left behind. As such, cure from your cancer is greatly reduced.

What does the treatment involve?

Planning

Your radiotherapy needs to be carefully planned. Before your treatment starts, you will have a Computed Tomography (CT) scan and a Magnetic Resonance Imaging (MRI) scan.

When you attend for a planning session, a CT scan will be used to identify your rectal cancer and help the radiologist to locate and mark its position. A small piece of metal is taped over your anus, to help mark its position on the CT scan. CT uses special X-ray equipment to obtain many images from different angles. Then a specially designed computer programme joins them together to show detailed pictures of the inside of the body.

If you haven't had an MRI scan at this point, an appointment will be arranged for you. MRI is a way of examining the body without the use of X-rays. It uses a strong magnetic field and an advanced computer system to provide clear and detailed pictures of the inside of the body.

You will be asked to lay on your front for much of this planning session, with a full bladder. The whole procedure takes around an hour.

Small, painless tattoos will be placed on your skin. These tiny permanent marks are used by the radiographers to set up the treatment area correctly and help to ensure you receive treatment to the same area on subsequent visits.

You can also expect to have a rectal and/or vaginal examination.

You may be given a contrast to drink to help your bowel to show up on the scan.

If you have a stoma in place, bring an extra stoma bag when you attend for your planning session.

Chemotherapy and Radiotherapy

Chemotherapy and radiotherapy treatment is usually given as an outpatient every day, Monday to Friday, for 5 to 5 ½ weeks.

If you are having treatment with 5- fluorouracil ('5FU'), given intravenously	If you are having treatment with Capecitabine, given in tablet form
<p>During weeks two, three and four your visits to the hospital will be short. However, during weeks one and five you need to have chemotherapy first, as such this can lead to you being in the outpatients department for a couple of hours.</p> <p>Week one - Daily visits Monday to Friday. First you will have your chemotherapy injection then one hour later you will have your radiotherapy treatment.</p> <p>Weeks two to four - Daily visits Monday to Friday for radiotherapy (no chemotherapy is given during this period).</p> <p>Week five – Your treatment will be the same as in week one.</p> <p>Week six – You will be given any remaining radiotherapy treatment.</p>	<p>You will need to take your Capecitabine tablets Monday to Friday, throughout the course of your treatment.</p> <p>Weeks one to five inclusive - Daily visits Monday to Friday for radiotherapy treatment.</p>

Once your treatment has finished, you can expect to wait 6 to 8 weeks before surgery is carried out. Depending on the treatment centre you attend, you may have a further CT and/or MRI scan performed to assess

your response to treatment.

Travelling can be difficult for some patients, particularly if you live some distance away. The hospital does have accommodation which patients can use free of charge. If this is something you feel you need, please mention this to either the specialist nurse or the doctor looking after you.

What are the early and temporary side effects of radiotherapy treatment?

You will not feel anything during the treatment, however as you carry on with your treatment you may develop some side effects and these can worsen as you get closer to finishing:

- Tiredness
- Diarrhoea – This can last for several weeks and tablets such as loperamide and codeine can help and may be prescribed for you
- Soreness or pain when passing water (cystitis) - This can last for several weeks before it settles
- Sore skin around your bottom – This may become worse as treatment progresses and creams will be provided for you to apply
- An increase in rectal loss (mucus from your back passage)
- Rarely, bowel obstruction can occur.

What are the possible long term or permanent side effects of radiotherapy treatment?

The possible long term or permanent side effects of radiotherapy include:

- Delayed pelvic wound healing, particularly if you need a permanent colostomy following your chemotherapy and radiotherapy
- Bowel damage / dysfunction causing narrowing or scarring, blockage, ulceration, chronic diarrhoea or poor absorption of food
- Bladder damage causing you to pass water more frequently or you may experience pain or bladder spasms
- In men, fertility will be lowered, and may be lost completely, due to reduced sperm counts and loss of erection or sexual dysfunction. If you are male and still wish to have children, you will be asked if you want to bank your sperm, prior to treatment. Fertility will be discussed with you in detail before your treatment begins
- In women, damage to your ovaries leading to early menopause and subsequent infertility. Fertility will be discussed with you in detail before

your treatment begins

- In women, vaginal dryness and narrowing leading to sexual dysfunction. There are treatments available for this.

You will be advised to eat a low fibre diet and information on this will be given to you when you attend for radiotherapy.

If you are sexually active, you will be advised to use contraception for the duration of your treatment.

What are the possible side effects of chemotherapy?

Chemotherapy (5FU or Capecitabine) is given as a radiosensitizer - this means that it makes the radiotherapy more effective.

You will not lose your hair with this chemotherapy, but may experience some hair thinning. This is not a permanent loss, your hair will grow back.

Additional information on 5FU or Capecitabine will be given to you before your treatment starts.

Other possible side effects include:

- Sickness
- Diarrhoea
- Loss of appetite
- Sore mouth and eyes
- Tiredness
- *Increased risk of developing an infection
- Sore hands and feet, particularly with Capecitabine.

You will be seen by an oncology doctor every week and any side effects will be discussed. Tablets will be given to you for sickness and diarrhoea and it is recommended that you take them if you need them.

*Chemotherapy not only damages cancer cells it can also damage healthy cells, as such it can reduce your body's ability to fight infection. It is important that you contact the on call oncology doctor if you develop flu like symptoms and have a high temperature (telephone numbers will be given to you). The doctor may want to admit you into hospital for a few days to give you antibiotics. If this occurs your chemotherapy may be

delayed until you are well again. You can also expect to have regular blood tests which provide information on how well your body is coping with the treatment.

What are the alternatives to pre-operative chemotherapy and radiotherapy treatment?

The aim of this treatment is to reduce the size of your cancer, and as a result, surgery to remove it is often made possible. There are no alternative methods of making this possible.

Glossary of medical terms used in this information:

Chemotherapy — The treatment of cancer with drugs.

Colostomy / Stoma — A colostomy is the end of the colon brought to the surface and stitched to the skin through a small cut in the abdomen. Faecal waste is then passed through the colostomy and collected in a bag that sticks to the skin.

CT Scan — Computed Tomography (CT) uses special X-ray equipment to obtain many images from different angles. Then a specially designed computer programme joins them together to show detailed pictures of the inside of the body.

MRI Scan — Magnetic Resonance Imaging (MRI) is a way of examining the body without the use of X-rays. It uses a strong magnetic field and an advanced computer system to provide clear and detailed pictures of the inside of the body.

Radiographer — A professional trained to operate equipment concerned with the production and detection of radiation. Radiographers work with Radiologists to aid diagnosis and treatment.

Radiosensitizer — A drug that makes tumour cells more sensitive to radiation therapy.

Radiotherapy — X-ray treatment that uses high energy rays to damage or kill cancer cells.

Rectum / Rectal — The last section of the digestive tract, extending from the colon to the anus, in which faeces is stored for elimination from the body.

Obstruction — A blockage in the bowel.

Oncology — The study and treatment of cancer.

Local sources of further information

You can visit any of the health/cancer information centres listed below:

Birmingham Women's Healthcare NHS Trust

Health Information Centre
Birmingham Women's Healthcare NHS Trust
Metchley Park Road
Edgbaston
Birmingham
B15 2TG
Telephone: 0121 627 2608

Good Hope Hospital NHS Trust

Cancer Information and Support Centre
Good Hope Hospital NHS Trust
Rectory Road
Sutton Coldfield
B75 7RR
Telephone: 0121 378 6641

Heart of England NHS Foundation Trust

Patient Information Centre
Birmingham Heartlands Hospital
Bordesley Green East
Birmingham
B9 5SS
Telephone: 0121 424 2280
Email: healthinfo.centre@heartofengland.nhs.uk

Sandwell and West Birmingham Hospitals NHS Trust

The Courtyard Centre
Sandwell General Hospital (Main Reception)
Lyndon
West Bromwich
B71 4HJ
Telephone: 0121 507 3792
Fax: 0121 507 3816

The Cancer Information Service
Birmingham Treatment Centre
City Hospital
Dudley Road
Birmingham
B18 7QH
Telephone: 0121 507 3792
Fax: 0121 507 3816

University Hospital Birmingham NHS Foundation Trust

The Patrick Room
Cancer Centre
University Hospital Birmingham NHS Foundation Trust
Queen Elizabeth Hospital
Edgbaston
Birmingham
B15 2TH
Telephone: 0121 697 8417

Walsall Primary Care Trust

Cancer Information & Support Services
Challenge Building
Hatherton Street
Walsall
Freephone: 0800 783 9050

For details of local cancer support groups and organisations, please ask your colorectal nurse.

Cancerbackup - Information in your language

Cancerbackup is the UK's largest cancer information charity, providing information, support and practical advice on all cancers, treatments and supportive issues: <http://www.cancerbackup.org.uk>

Cancerbackup's freephone helpline can now give information and support to people affected by cancer in more than 100 languages. People whose first language is not English can contact the specialist cancer information nurses on freephone **0808 800 1234**, who will then link in a relevant interpreter. There are also 12 additional freephone lines specifically for speakers of the most common community languages. Lines are open Monday to Friday 9am-8pm.

(Source: <http://www.cancerbackup.org.uk>)

Freephone numbers:

Arabic: 0808 800 0130

Bengali: 0808 800 0131

Cantonese: 0808 800 0132

English: 0808 800 1234

French: 0808 800 0133

Greek: 0808 800 0134

Gujarati: 0808 800 0135

Hindi: 0808 800 0136

Polish: 0808 800 0137

Punjabi: 0808 800 0138

Turkish: 0808 800 0139

Urdu: 0808 800 0140

Vietnamese: 0808 800 0141

About this information

This guide is provided for general information only and is not a substitute for professional medical advice. Every effort is taken to ensure that this information is accurate and consistent with current knowledge and practice at the time of publication.

We are constantly striving to improve the quality of our information. If you have a suggestion about how this information can be improved, please contact us via our website: <http://www.birminghamcancer.nhs.uk>

This information was produced by Pan Birmingham Cancer Network and was written by Consultant Surgeons, Clinical Nurse Specialists, Allied Health Professionals, and Patients and Carers from the following Trusts:

Good Hope Hospital Trust
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Sandwell and West Birmingham NHS Trust
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