Chemotherapy for colon cancer

This information is an extract from the booklet Understanding colon cancer. You may find the full booklet helpful. We can send you a free copy – see page 10.

Contents

• Early-stage colon cancer
• Chemotherapy for advanced (secondary) cancer of the colon
• How chemotherapy is given
• Side effects

Chemotherapy is the use of anti-cancer (cytotoxic) drugs to destroy cancer cells.

Early-stage colon cancer

Chemotherapy isn’t usually needed for stage 1 colon cancers that haven’t begun to grow through the muscle wall and aren’t affecting the lymph nodes.

For stage 2 colon cancers, the risk of the cancer coming back is low, so chemotherapy may not be needed. However, after surgery the cancer will be examined carefully under the microscope. If cancer cells are found in the blood or lymph vessels very close to the cancer, your doctor may recommend chemotherapy. Giving chemotherapy after surgery is known as adjuvant treatment. Its aim is to reduce the risk of the cancer coming back.

You may also be offered chemotherapy as part of a clinical trial. Your cancer specialist will discuss whether chemotherapy will be of any benefit to you if you have stage 2 colon cancer.

People with stage 3 colon cancer are usually offered chemotherapy. They may also be offered chemotherapy as part of a trial.
The main drugs used in the adjuvant treatment of colon cancer are a combination of the following:

- 5-fluorouracil (5FU), which is often given with the vitamin folinic acid (leucovorin)
- capecitabine (Xeloda®)
- oxaliplatin (Eloxatin®)
- irinotecan (Campto®).

**Benefits and disadvantages of adjuvant chemotherapy for early-stage colon cancer**

There are various benefits and risks of having chemotherapy. Your doctor can discuss these with you.

Chemotherapy can reduce the chance of the cancer coming back, but it doesn’t guarantee this. It can also sometimes cause side effects that may be unpleasant. To help decide whether adjuvant chemotherapy may be appropriate in your case, your specialist will take into account the risk of any cancer cells being left behind, the likelihood that the chemotherapy will get rid of them, and the possible side effects of the treatment.

Our booklet *Understanding chemotherapy* discusses the treatment and its side effects in detail. We also have fact sheets about individual drugs and their effects.

If the chance of the cancer coming back is low, the chemotherapy may only slightly reduce the chance of the cancer returning. However, if the risk is high, the benefit of chemotherapy may be greater. It’s important to discuss the possible risks and benefits of chemotherapy in your particular situation with your doctor.

Adjuvant chemotherapy for colon cancer is usually given with a drug called 5-fluorouracil (5FU). 5FU is usually given with a vitamin called folinic acid (leucovorin), which makes it more effective. A tablet that works in the same way as 5FU, known as capecitabine (Xeloda®), is sometimes used. Other drugs such as oxaliplatin (Eloxatin®) or irinotecan (Campto®) are often used if the cancer has spread to the lymph nodes close to the colon.

There’s some evidence that chemotherapy is less effective in older people. You and your specialist will discuss whether treatment is appropriate for you.
There are several research trials in the UK looking at different chemotherapy drugs, or combinations of drugs, to treat colon cancer. You may be asked if you’d like to take part in a research trial.

Chemotherapy for advanced (secondary) cancer of the colon

Chemotherapy may also be given when the colon cancer has spread to another part of the body (secondary or advanced cancer). Although cancer of the colon that’s spread to another part of the body can’t usually be cured, treatment with chemotherapy may be recommended by your doctor. The aim of the chemotherapy is to shrink the cancers and reduce symptoms. This can sometimes help to prolong life.

The most common place for it to spread to is the liver. The next most common place is the lungs. Chemotherapy may be given to shrink cancers before they are removed from the liver or, more rarely, the lungs. Sometimes drugs called monoclonal antibodies are given in combination with chemotherapy to shrink the tumour before surgery.

Benefits and disadvantages of chemotherapy for advanced cancer of the colon

There are various benefits and disadvantages of chemotherapy for advanced bowel cancer, and it’s important to discuss these with your cancer specialist.

It isn’t possible to predict whether chemotherapy will work for a particular person, but if they are fairly fit, the treatment is more likely to be effective. It’s also less likely to have side effects than in someone who is unwell when they start the treatment.

You don’t have to have chemotherapy unless you want to. If you choose not to, you’ll still be given treatment to help control any symptoms caused by the cancer. This is known as supportive or palliative care. Palliative care can also be given alongside chemotherapy if needed.

Your doctor will consider a number of things before asking you to make a decision about particular treatments. This will include the position of the secondary cancer, your general health and any chemotherapy treatment you’ve had in the past.
The most commonly-used chemotherapy drugs for advanced bowel cancer are:

- 5-fluorouracil (5FU), which is usually given with the vitamin folinic acid (leucovorin)
- capecitabine (Xeloda®) tablets
- tegafur with uracil (Uftoral®) tablets, which are usually given with the vitamin folinic acid
- oxaliplatin (Eloxatin®)
- irinotecan (Campto®)
- raltitrexed (Tomudex®)
- mitomycin C.

Several research trials are being carried out to test new drugs for advanced colon cancer, and to help find the best way of using the current drugs (those mentioned above). You may be asked if you’d like to take part in a research trial using new chemotherapy drugs or new types of treatments.

If the cancer starts to grow again, during or after the chemotherapy, you may be given a different type of chemotherapy (this is known as second-line treatment). Sometimes a third course of chemotherapy (third-line treatment) may be given.

How chemotherapy is given

Many people are given capsules or tablets, which are swallowed with water.

Some chemotherapy drugs are given by injection into a vein (intravenously). The drugs may be given through a vein in the back of your hand; a plastic line called a central line, in your chest; or a thin tube inserted into a vein in the crook of your arm (a PICC line).

We can send you information about central lines and PICC lines.
Sometimes chemotherapy can be given continuously through a small portable pump, which is attached to your central or PICC line. A controlled amount of the drug is given into the bloodstream over a period of time. This means that you can go home with the pump, and spend less time in hospital.
You can have intravenous chemotherapy as an outpatient or inpatient, depending on the treatment. If the treatment lasts for only a few hours, it’s usually given as an outpatient.

If your treatment lasts a few days it will usually be given as an inpatient, but it may be possible for you to have it as an outpatient. Your specialist will discuss this with you.

After the treatment, you’ll usually have a rest period of a few weeks. This allows your body to recover from the side effects of the treatment. The treatment and rest period make up a cycle of treatment. Each cycle usually lasts two or three weeks.

The number of cycles you have may depend on the stage of cancer and how well it’s responding to the drugs. You may have a CT scan after you’ve had a number of cycles, depending on your situation. A CT scan takes a series of x-rays to build up a picture of the inside of the body.

**Side effects**

Chemotherapy can sometimes cause unpleasant side effects, but if your cancer is causing symptoms it can also make you feel better by relieving them. Most people have some side effects, but they can usually be well controlled with medicines. Common side effects are described here, along with some ways of reducing them. Although they may be hard to bear at the time, they’ll gradually disappear when your treatment is over. However, for some people, this can take longer.

**Lowered resistance to infection (neutropenia)**

Chemotherapy can temporarily reduce the production of white blood cells in your bone marrow, making you more prone to infection. This effect can begin about seven days after treatment has been given, and your resistance to infection usually reaches its lowest point about 10–14 days after chemotherapy. Your white blood cells will then increase steadily and will usually return to normal before your next cycle of chemotherapy is due.

You should contact your doctor or the hospital straight away if:

- your temperature goes above 38°C (100.4°F)
- you suddenly feel unwell, even with a normal temperature.
You will have a blood test before having more chemotherapy to make sure that your white blood cells have recovered. Occasionally it may be necessary to delay your treatment if your blood count is still low.

**Bruising or bleeding**

Chemotherapy can reduce the production of platelets, which help the blood to clot. Tell your doctor if you have any unexplained bruising or bleeding, such as nosebleeds, bleeding gums, blood spots or rashes on the skin. You can have a platelet transfusion if your platelet count is low.

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

Chemotherapy can reduce the number of red blood cells, which carry oxygen around the body. A low red blood cell count is called anaemia. This may make you feel tired and breathless. Tell your doctor or nurse if you have these symptoms. You may need to have a blood transfusion if the number of red blood cells becomes too low.

**Tiredness (fatigue)**

Feeling tired is a common side effect of chemotherapy, especially towards the end of treatment and for some weeks after it’s over. It’s important to try to pace yourself and get as much rest as you need. Try to balance this with taking some gentle exercise, such as short walks, which will help. If tiredness is making you feel sleepy, don’t drive or operate machinery.

*We have a booklet called *Coping with fatigue*, which you may find helpful.*

**Nausea and vomiting**

Your doctor can prescribe very effective anti-sickness (anti-emetic) drugs to prevent, or greatly reduce, nausea or vomiting. If the sickness isn’t controlled, or if it continues, tell your doctor; they can prescribe other anti-sickness drugs that may be more effective.

*We have a fact sheet about nausea and vomiting.*
Diarrhoea

Some of the chemotherapy drugs used to treat bowel cancer can cause diarrhoea. This often starts several days after the treatment. If you’re taking chemotherapy tablets or capsules at home, it’s important to let your doctor or nurse know if you have diarrhoea. Your treatment may need to be stopped. It’s important to drink plenty of fluids if you have diarrhoea. You may also be able to help control it by eating a low-fibre diet.

Our booklet *Eating problems and cancer* has advice on this.

If you’ve had a colostomy or ileostomy, it may be more difficult to cope with diarrhoea caused by the chemotherapy. Your stoma nurse or cancer specialist can give you advice and support. Some people need to be close to a toilet during the course of their treatment and for a while afterwards. This can be frustrating, but it usually improves gradually a few weeks after the treatment has ended. If diarrhoea continues after a few weeks, it’s important to talk to your cancer specialist or stoma nurse, so that they can help you find ways to overcome it.

Sore mouth

Your mouth may become sore or dry, or you may notice small ulcers during treatment. Drinking plenty of fluids, and cleaning your teeth regularly and gently with a soft toothbrush, can help to reduce the risk of this happening. Tell your nurse or doctor if you have any of these problems, as they can prescribe mouthwashes and medicine to prevent or clear mouth infections.

If a sore mouth makes eating difficult, you can try replacing meals with nutritious drinks (see our booklet *Eating problems and cancer*).

Our fact sheet *Mouth care during chemotherapy* has some useful tips on coping with a sore mouth.
Hair loss

Ask your doctor if the drugs you’re taking are likely to make your hair fall out. Most drugs used to treat colon cancer do not, but some may make your hair thinner. If you lose any hair it will grow back once the treatment has finished. Your nurse can give you advice about coping with hair loss.

We have a booklet called Coping with hair loss, which we can send you.

Sore hands and feet

This is sometimes known as palmar plantar or hand-foot syndrome. It can happen when 5FU or capecitabine are given over a long period of time or are given continuously through a pump. It is usually temporary and improves when the treatment is finished. Your doctor may prescribe creams or a vitamin called pyridoxine (vitamin B6), which some people find helpful. It can also help to keep your hands and feet cool and to avoid tight-fitting clothing such as socks, shoes and gloves.

Numbness or tingling in the hands or feet

Oxaliplatin can have an effect on nerve endings, known as peripheral neuropathy. This may result in feelings of numbness or tingling, especially in the hands or feet. You may also notice that you have difficulty doing up buttons or similar fiddly tasks.

For some people, these symptoms can be triggered by anything cold, such as iced drinks and cold air. If you notice that your symptoms are related to the cold you should avoid cold drinks and wrap up warmly in cold weather. It is important to let your doctor know about your symptoms as they may be controlled by slightly lowering the dose of the drug.

Sometimes the tingling or numbness may not happen with the first treatment, but after several treatments. This is known as a ‘cumulative effect’ and should improve after the treatment has finished. However, for some people, the tingling and numbness can last for several months or persist. Tell your doctor if this is the case for you.
Contraception

It’s not advisable to become pregnant or father a child while taking any of the chemotherapy drugs to treat colon cancer, as the drugs may harm the developing baby. It’s important to use effective contraception (usually a ‘barrier method’, such as condoms) during your treatment and for at least a few months afterwards. You can discuss this with your doctor or nurse. It’s not known whether chemotherapy drugs can be present in semen or vaginal fluids. To protect your partner, it’s safest to either avoid sex or use a barrier form of contraception for about 48 hours after chemotherapy treatment.

More information and support

Cancer is the toughest fight most of us will ever face. But you don’t have to go through it alone. The Macmillan team is with you every step of the way, from the nurses and therapists helping you through treatment to the campaigners improving cancer care. We are Macmillan Cancer Support.

To order a copy of Understanding colon cancer or one of the other booklets or fact sheets mentioned in this information, visit be.macmillan.org.uk or call 0808 808 00 00.

We make every effort to ensure that the information we provide is accurate but it should not be relied upon to reflect the current state of medical research, which is constantly changing. If you are concerned about your health, you should consult your doctor. Macmillan cannot accept liability for any loss or damage resulting from any inaccuracy in this information or third party information such as information on websites to which we link. © Macmillan Cancer Support 2012. Registered charity in England and Wales (261017), Scotland (SC039907) and the Isle of Man (604). Registered office 89 Albert Embankment, London, SE1 7UQ

REVISED IN JULY 2012
Planned review in 2014