Colorectal cancer

Information for the public
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About this information

NICE guidelines provide advice on the care and support that should be offered to people who use health and care services.

This information explains the advice about the care and treatment of people with colorectal cancer that is set out in NICE clinical guideline 131.

Does this information apply to me?

Yes, if you are:

- an adult (18 years and older) with colorectal cancer
- a family member or carer of an adult with colorectal cancer.

No, if you:

- are a child (younger than 18) with colorectal cancer
- have anal cancer or other types of cancer that can grow in the colon or rectum but are not known as colorectal cancer.
Your care team

A range of professionals who specialise in different areas of treatment or support may be involved in your care. All of these professionals will be trained and experienced in providing particular treatments or support.

Working with you

Your care team should talk with you about colorectal cancer. They should explain any tests, treatments or support you should be offered so that you can decide together what is best for you. Your family or carer can be involved in helping to make decisions, but only if you agree.

You may also like to read NICE’s information for the public on patient experience in adult NHS services. This sets out what adults should be able to expect when they use the NHS. We also have more information on the NICE website about using health and social care services.

Some treatments or care described here may not be suitable for you. If you think that your treatment does not match this advice, talk to your care team.

Colorectal cancer

Colorectal cancer is one of the most common cancers in the UK, with about 40,000 people newly diagnosed each year. It is more common in people aged 65 and over.

In colorectal cancer, cells in the colon or in the rectum start to grow in an uncontrolled way, forming a lump called the primary cancer or primary tumour. Like other cancers, colorectal cancer starts in a small area but can spread to other parts of the body to form metastatic tumours.

The term colorectal cancer covers cancers in both the colon (colon cancer) and the rectum (rectal cancer) but your tests and treatment will vary depending upon which form you have.

Diagnosing colorectal cancer

If your doctor thinks that you may have colorectal cancer, they should advise you to have tests. More than one test may be needed to diagnose colorectal cancer, or rule it out completely. The tests or scans you are offered depend on any other conditions you have. Some tests or scans may not be suitable for you. Tests you may be offered are:
• colonoscopy
• flexible sigmoidoscopy
• CT colonography
• barium enema.

Questions about finding out what is wrong (diagnosis)

• Please give me more details about the tests/investigations I should have.
• What do these tests involve?
• Where will these be carried out? Will I need to have them in hospital?
• How long will I have to wait until I have these tests and get the results?
• Who will tell me the results?
• Will I need to have more tests?

Acute large bowel obstruction

Sometimes a tumour in the colon or rectum can stop faeces (stool) passing through the body and block the bowel. This can cause pain and vomiting. It is known as acute large bowel obstruction, and needs to be treated as a medical emergency.

If your healthcare team thinks you have acute large bowel obstruction, you should be offered a CT scan of your chest, abdomen and pelvis to confirm this diagnosis and to see if the obstruction has made a hole in your colon or if the cancer has spread to other parts of your body (metastasised). If you have been admitted to hospital as an emergency, the healthcare team will first make sure your condition is stable.

The type of treatment you are offered will depend upon your condition and if you are well enough for surgery. If surgery could potentially remove your tumour or clear the obstruction, your healthcare team should explain that there are 2 treatment options. Your acute large bowel obstruction can be treated by immediate surgery, or by placing a small metal tube known as a stent into your colon to hold it open and then with surgery a few weeks later.

At the moment it isn't clear whether immediate surgery or a stent followed by surgery is better for relieving acute bowel obstruction. Your doctor should explain and discuss all options with you and
your family members or carers (if this is appropriate). You may be offered the chance to take part in a clinical trial that looks at immediate surgery, and stents followed by surgery, to find out which is the better treatment.

If you are not well enough for surgery, or your tumour cannot be treated with surgery, you may still be offered a stent to treat the obstruction before any other treatment for your tumour.

Finding out the extent of the colorectal cancer

If tests confirm that you do have colorectal cancer, your healthcare team should assess the stage of the cancer to see whether it has spread. This is called 'staging.' This helps your healthcare team to decide which treatments are suitable for you. The stages are:

- **Stage I** – the cancer has not spread beyond the original colorectal tumour.
- **Stage II** – tumours may have grown through the bowel wall and into nearby tissues but have not spread to new parts of the body.
- **Stage III** – tumour cells can be found in nearby lymph nodes.
- **Stage IV** – the tumour has spread to other parts of your body (see Further treatment for details of tests and treatments that can be used if the cancer has spread).

You should be offered a scan of your chest, abdomen and pelvis to estimate the stage of disease. Usually this will be with contrast-enhanced CT.

If you have colon cancer, you should not be offered any more routine scans (MRI or ultrasound) to estimate the stage of disease.

A digital rectal examination (with a doctor’s finger) may be done as part of the diagnosis of colorectal cancer, but it should not be used to measure the stage of your cancer.

**Rectal cancer**

If you have rectal cancer, you should also be offered an MRI scan. Information from the MRI scan should help your healthcare team to decide whether the cancer is likely to come back after it is removed (also known as recurrence).

The possibility of the cancer coming back is divided into low risk, moderate risk and high risk, depending on how much the cancer has grown into and through the rectum and whether it has...
spread to nearby lymph nodes. The MRI scan may show that the rectal cancer could be removed by minor surgery that does not need part of the bowel to be removed, or MRI may not be suitable for you. If this is the case, you should be offered a type of ultrasound scan inside your rectum using a thin tube, similar to colonoscopy.

**Decisions about your care**

Some treatments may not be suitable for you, depending on your exact circumstances. If you have questions about specific treatments and options, please talk to a member of your healthcare team.

A team of healthcare professionals who specialise in colorectal cancer (such as doctors, nurses and physiotherapists) should meet regularly to discuss your care and treatment. This team is known as the multidisciplinary team.

The multidisciplinary team discusses the issues below and works out the best approach to your care.

The multidisciplinary team should discuss:

- the stage of the cancer
- how easy it may be to remove
- what treatments may be suitable, such as chemotherapy or radiotherapy, or both
- whether the cancer is likely to come back after treatment
- what side effects you could have from treatment, how long they may last, and effects that may not appear for a while after your treatment.

The multidisciplinary team recommends treatment options that are suitable for you, but you should decide on the treatment you prefer once you have all the information.

At all stages of your care, a member of your healthcare team should discuss with you the results of any tests you have. They should also talk to you about suitable treatment options after they have been discussed in the multidisciplinary team. You should have the risks and benefits of all treatment options explained clearly to you so that you can make informed decisions about your care.

You may decide that you do not want to have any of the recommended treatments. In these circumstances your healthcare team should continue to give you care and support.
Information about bowel function

Your treatment may have effects on your bowel function, so you should be given specific information about this.

Before any surgery, you should be offered information about the possibility that you may need a stoma. This may be either a temporary or permanent colostomy or a temporary or permanent ileostomy. You should be told why a stoma may be needed, and how long you might need it for. If you are likely to need a stoma, a trained stoma professional should give you specific information on care and management of a stoma.

People react to chemotherapy and radiotherapy in different ways, and the full effects of surgery sometimes aren't known until the surgeon removes the tumour. So after any treatment your healthcare professional should discuss with you, and offer you information on, its likely effects on your bowel function. This may include information on incontinence, diarrhoea, constipation, bloating, excess wind, and diet. You should be offered written information that you can understand, including information about support organisations or internet sites.

Treatments before surgery for rectal cancer

If you have a rectal tumour that cannot be operated on immediately, and that has a moderate or high risk of coming back after surgery, you may be offered treatment to shrink the tumour before surgery. The treatments used are known as short-course radiotherapy and chemoradiotherapy.

You should not be offered short-course radiotherapy or chemoradiotherapy if you have a rectal tumour with a low risk of coming back after surgery, unless as part of a clinical trial. You should also not be offered chemotherapy on its own before surgery for colorectal cancer that has spread only locally (not to the rest of the body) unless you are taking part in a clinical trial.

Surgery to remove the tumour

Most people should be offered surgery to remove their colorectal tumour. Your surgeon should discuss with you whether the tumour can be removed by laparoscopic or open surgery.

To help you decide which type of surgery might be best for you, the surgeon should discuss the risks and benefits of both procedures, and the experience the surgeon has in both types of surgery.
Further treatment

If you think that your care does not match what is described in this information, please talk to a member of your healthcare team in the first instance.

Stage I colorectal cancer

If you have had a stage I colorectal tumour removed, the multidisciplinary team should consider whether further treatment is needed and your doctor should discuss the risks and benefits with you. You should be offered further treatment if the area around where the tumour was removed is thought to contain some cancer cells.

If you have stage I rectal cancer, your doctor should also discuss with you and your family or carers (if this is appropriate) the possible benefits and risks of treatments. They should explain that these are not certain and may offer you the chance to take part in a clinical trial of treatments for stage I rectal cancer.

Chemotherapy

You should be offered adjuvant chemotherapy if you had stage III colon cancer, to kill any cancer cells that may remain after surgery. You and the multidisciplinary team should together decide on the most appropriate treatment after discussing side effects, how the drug will be given (tablets or injection into a vein), and your preferences.

You may be offered adjuvant chemotherapy if you had stage II or III rectal cancer, or stage II colon cancer, and the tumour is thought to have a high risk of coming back.

If the colorectal cancer has spread to other parts of your body

Scans for metastatic tumours

You should be offered a contrast-enhanced CT scan of your chest, abdomen, and pelvis if your healthcare team thinks the cancer may have spread to other parts of your body (stage IV colorectal cancer).

If the healthcare team thinks the cancer has spread to your brain, you should be offered a contrast-enhanced MRI scan of your brain. You should not be offered scans of your head, neck, or limbs unless your healthcare team has a reason to think that you have tumours in these places.
The multidisciplinary team should discuss the results of all scans with you.

Depending on where the CT scan shows you have metastatic tumours, you may be offered other scans such as MRI or PET-CT.

If your healthcare team cannot be sure whether or not you have metastatic tumours, you should be offered more scans at intervals agreed between you and your healthcare team.

**Chemotherapy for metastatic colorectal cancer**

If you have symptoms from the main tumour, treating them should be the main priority.

If you have metastatic colorectal cancer you should be offered chemotherapy and then surgery, if the tumours can be removed by surgery. There are various different types of chemotherapy for metastatic cancer. Your healthcare professional should discuss the options with you and their risks and benefits so that you can make an informed decision about which treatment, if any, to have.

**Questions about the treatment**

- Will I need to have an operation?
- Please tell me why you have decided to offer me this particular type of treatment.
- What are the pros and cons of having this treatment?
- Please tell me what the treatment will involve. How does it work?
- How will the treatment help me? What effect will it have on my symptoms and everyday life? What sort of improvements might I expect?
- How long will it take to have an effect?
- What might happen if I choose not to have the recommended treatment?
- Is there some written material (like a leaflet) about the treatment that I can have?

**Follow-up**

If the aim of your treatment was to cure the colorectal cancer, you should be offered follow-up starting with a clinic visit 4–6 weeks after that treatment. You should be offered at least two CT scans of your chest, abdomen and pelvis in the first 3 years and regular blood tests.
should be offered a colonoscopy 1 year after surgery and if your colon looks normal you may be offered another in 5 years.

If at any time during your follow-up your healthcare team suspects that the cancer has returned, you should be offered the same tests as when you were first diagnosed with colorectal cancer. Follow-up should stop when you and your healthcare team agree that the risks of more tests outweigh the potential benefits.

Ongoing care and support

NICE has produced separate guidance on supportive and palliative care services for adults with cancer.

Supportive care means helping patients and their families cope with cancer and its treatment. Palliative care means alleviating pain and discomfort to improve a person's quality of life when it's not possible to cure the cancer.

Questions you might like to ask your healthcare team

- Please tell me more about colorectal cancer.
- Are there any support organisations in my local area?
- Can you provide any information for my family/carers?

Explanation of medical terms

Abdomen

The part of the body between the chest and the pelvis. It contains many of the body's organs, such as the stomach, bowel, liver and kidneys.

Adjuvant chemotherapy

Extra treatment given at the same time as or after surgery (or other main treatment) to remove a cancer. Adjuvant treatment aims to kill any cancer cells left after the operation, or to stop the cancer from growing back.
Anus

The opening at the end of your bowel.

Barium enema

The large bowel is filled with barium fluid inserted through a tube into the rectum and then an X-ray is taken. Barium shows up any abnormal areas that might indicate colorectal cancer on the X-ray. When barium is used in this way it is known as a contrast agent.

Chemoradiotherapy

Treatment with anticancer drugs at the same time as radiation treatment to shrink a tumour.

Chemotherapy

A type of treatment that uses anticancer drugs to destroy cancer cells. A course of chemotherapy normally involves several cycles of treatment.

Clinical trial

Clinical trials test new treatments to see how well they work and what their side effects are.

Colon

The colon is the longest part of the large bowel, ending just before the rectum and anus.

Colonoscopy

A flexible tube containing a video camera is inserted through the rectum into the colon. This shows any abnormal areas inside the large bowel that could indicate colorectal cancer. Tissue samples (biopsies) of any abnormal areas can be taken during this procedure.

Colostomy

An opening from the large bowel, to allow faeces to leave your body without passing through the anus.
**Contrast-enhanced CT**

Contrast-enhanced CT (computed tomography) uses a combination of a dye (known as a contrast agent) and X-rays to obtain a more detailed image of the size, location and spread of the tumour.

**Contrast-enhanced MRI**

Contrast-enhanced MRI (magnetic resonance imaging) uses magnetic fields and radio waves with a dye (known as a contrast agent) to produce high-quality images.

**CT scan**

CT scanning uses a series of X-rays to produce high-quality images.

**CT colonography**

A CT scan of the large bowel that produces two- and three-dimensional images. You may be offered this test if you have had polyps removed and a colonoscopy is not suitable for you.

**Flexible sigmoidoscopy**

Similar to colonoscopy. It uses a thin flexible tube with a camera and can take a biopsy, but it can't see as far inside the colon as colonoscopy.

**Ileostomy**

An opening from the small bowel, to allow faeces to leave your body without passing through the large bowel.

**Laparoscopic surgery**

Often called 'keyhole' surgery. Small cuts are made in the patient’s abdomen and a fine flexible telescope (a laparoscope) and other specialised instruments are inserted through these cuts.

**Lymph nodes**

A network of glands found throughout the body that are involved in fighting infection and cancer.
**Metastatic tumours**

Tumours that have spread to other parts of the body, such as the liver, bones or brain, are described as metastatic.

**MRI**

MRI (magnetic resonance imaging) uses magnetic fields and radio waves to produce high-quality images.

**Multidisciplinary team**

A specialist team experienced in assessing and managing colorectal cancer.

**Open surgery**

Traditional surgery that needs larger cuts to open your abdomen for the surgeon to access the tumour.

**PET-CT**

PET-CT (positron emission tomography) is a whole-body scan that uses a type of radiation called positrons instead of X-rays to obtain an image. A radioactive substance is injected before the scan.

**Radiotherapy**

Using X-rays and other forms of radiation to target and destroy cancer cells.

**Rectum**

The last part of the large bowel, closest to the anus.

**Recurrence**

When cancer comes back in a person thought to be cancer-free after treatment.
Short-course radiotherapy

High doses of radiation over a short time (days) to shrink a tumour.

Stent

An expandable metal tube.

Stoma

An opening in your large or small bowel that is attached to a bag to collect faeces.

Ultrasound scan

A type of scan that uses ultrasound waves (very high frequency sound waves) to obtain images of inside the body.

More information

The organisations below can provide more information and support for people with colorectal cancer. NICE is not responsible for the quality or accuracy of any information or advice provided by these organisations.

- Beating Bowel Cancer, 020 8973 0011 www.beatingbowelcancer.org
- Bowel Cancer Information www.bowelcancer.tv
- CancerHelp UK, 0808 800 4040 www.cancerhelp.org.uk
- Macmillan Cancer Support, 0808 808 00 00 www.macmillan.org.uk

You can also go to NHS Choices (www.nhs.uk) for more information.
