NHS
Royal Cornwall Hospitals
NHS Trust

Colorectal or bowel cancer

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What is colorectal or bowel cancer?

Colorectal cancer is a malignant (spreading) tumour that affects the large bowel. It is the second most common cause of death from cancer in the UK. Each year, over 40,000 people are diagnosed with this disease. However, when diagnosed and treated at an early stage, it can be cured.

What causes bowel cancer?

Most cases of bowel cancer occur in people who have had polyps for many years. Polyps look like mushrooms growing on the inner lining of the bowel. They are benign (non-cancerous or non-malignant) tumours of the large bowel. Polyps may occur at any age, but are more common in some families and with increasing age. Polyps are often found in one third of those over 60. Polyps rarely change to become cancerous, and cancer only actually occurs in one in 70 people over the age of 60. Bowel cancer first starts in the inner lining of the bowel, but with time spreads through the bowel wall and to nearby glands (lymph nodes).

Who is at most risk of developing bowel cancer?

Colorectal cancer is quite common - it is the fourth most common cancer in the UK accounting for 12% of all new cases. The lifetime risk for colorectal cancer is 1 in 14 for men and 1 in 19 for women will be diagnosed with bowel cancer during their lifetime. (Ref Cancer Research UK), and at least 10% of the population over the age of 50 will have a relative who has been affected by it.

Close relatives of people with colorectal cancer are at greater risk of developing it. The risk increases by the number of relatives affected, the closer the family relationship, and the younger they are at the time of diagnosis. The following approximate risks apply:

	Lifetime risk
General population	1 in 25
One first degree relative (late onset)	1 in 17
One first degree and one second degree relative	1 in 12
One first degree relative (diagnosed <45 years)	1 in 10
Both parents	1 in 8.5
Two first degree relatives (sibling and parent)	1 in 6
Three first degree relatives	1 in 2

Two genetic (hereditary) syndromes lead to cancer at an early age:

1. Hereditary non polyposis colorectal cancer (HNPCC or Lynch syndrome).
2. Familial adenomatous polyposis (FAP).

These are caused by a mutation (change) in a gene on one of the chromosomes. FAP affects about 1% of all patients with colorectal cancer. There is a 50% chance of this mutation being passed on to children, and everyone affected will develop cancer. These patients develop multiple (lots) small polyps in their bowel during childhood, and go on to develop cancer before the age of 40.

The HNPCC gene mutation affects 2-5% of all patients with colorectal cancer. There is again the chance of this mutation being passed on to children, but only about 80% of people with this mutation will develop cancer. Only a few polyps occur in the bowel of these patients, but they tend to develop cancer before the age of 40. Family members of both FAP and HNPCC need to be investigated (screened).

What are the symptoms of polyps or cancer?

Most polyps have no symptoms, but some may cause bleeding and produce mucus. Colorectal cancers may cause bleeding, anaemia, a change in bowel habit, abdominal pain or discomfort. Polyps or cancers can be discovered before they cause symptoms by special investigations (screening).

How are patients investigated for polyps or colorectal cancer?

Patients with a strong family history of colorectal cancer and families with FAP or HNPCC should be referred to a clinical geneticist.

Patients with no symptoms, but with one older relative, or several distant relatives who have been affected do not need to be screened. Screening is reserved for patients who have at least a 1 in 12 risk of developing bowel cancer, or who already have symptoms.

The large bowel is examined by inserting a telescope into the anus (back passage), with a barium enema, or a CT scan. The telescope may be short (rigid or flexible sigmoidoscope), or long (colonoscope). The rigid sigmoidoscope only examines the lower 15-20cm of the bowel. The flexible sigmoidoscope only

examines the left side of the colon where about two thirds of cancers occur. Only the colonoscope, barium enema or CT scan can examine the entire bowel. The telescope has the advantage that polyps can be removed for biopsies (small samples taken for analysis) and for this reason is preferred for screening purposes.

All investigations have risks or complications. A CT scan exposes the patient to radiation. A telescope examination carries a risk of perforation or bleeding.

How are polyps treated?

Most polyps can be removed from the inside of the bowel at the time of the telescope examination. A few require an operation.

How are cancers treated?

Nearly all bowel cancers require surgical removal of the affected part of the bowel. In most cases the ends of the bowel are rejoined. Occasionally, such as when the cancer is near the anus, a stoma (when the bowel opens onto the surface of the abdomen) is required. This may be temporary, to rest a join while it heals, or permanent if the whole rectum needs to be removed, or the cut ends cannot be rejoined.

How will I know if the cancer has spread?

Bowel cancer usually spreads to the liver first. This often causes no symptoms. If the cancer has spread to the liver this will be detected (in most cases) by a CT scan. In some patients, liver deposits can be removed by an operation. If this is possible, patients are usually referred to another hospital specialising in liver surgery.

When the piece of bowel containing the cancer is removed, it is examined by a pathologist to find out whether it has spread through the wall of the bowel or to local glands (lymph nodes). The more advanced the cancer is at this stage, the more likely it is that it has spread.

What are the chances of a cure?

The effectiveness of treatment and the chance of being cured, depends on how advanced the cancer is. The different stages are described below as a medical classification term known as Dukes'.

Dukes' stage		Frequency	5 yr survival
A	Cancer within bowel	8.7%	93.2%
B	Cancer within bowel wall	24.2%	77%
C	Cancer spread to lymph nodes	23.6%	47.7%
D	Distant spread (ie liver)	9.2%	6.6%

(Cancer Research UK 2012)

Please note: Many patients are elderly and die from other causes.

Will I need any other treatment after surgery?

Chemotherapy is often given to patients as well as an operation, to kill any small cancer cells that may have spread. If the cancer is caught early enough, while it is still small, and before it has spread to the glands, chemotherapy is not needed. Chemotherapy is usually recommended for some patients with Dukes' B and for most patients with Dukes' stages C and D. Radiotherapy (X-ray treatment) is sometimes used, with or without chemotherapy before surgery. This will either shrink the cancer in the pelvis, or destroy any cancers that may remain in the pelvis after surgery.

What will happen if I don't have cancer treatment?

The bowel cancer will continue to grow and may cause a blockage, bleeding or perforation. Cancer cells will spread to other parts of the body (metastasis) and may cause other symptoms such as pain, or additional complications.

What are the risks and benefits of surgery?

Alternative treatments to surgery include supportive care, such as:

- painkillers
- laxatives

- anti sickness drugs
- steroids.

In some patients a blocked bowel can be improved with either a defunctioning stoma, or by placing a stent (mesh which is placed in the bowel to keep the tumour edges apart) to allow the bowel to empty.

The aim of surgery is to remove the cancer and the affected tissues so that a cure may be achieved. Surgery itself does carry some risks, including:

- deep vein thrombosis that may lead to a blood clot in the lung
- a blood clot forming that could cause a stroke or heart attack
- bleeding
- breakdown of the join in the bowel
- infection in the chest, wound or urinary system.

Blood thinning injections will be given and you will need to wear special stockings to help prevent blood clots. You will be given antibiotics to reduce the risk of infection. You will also be encouraged to become mobile as early as possible.

What happens when I go into hospital?

You will be admitted the day before your operation to familiarise yourself with your surroundings. During this time, important details can be taken and necessary tests performed including:

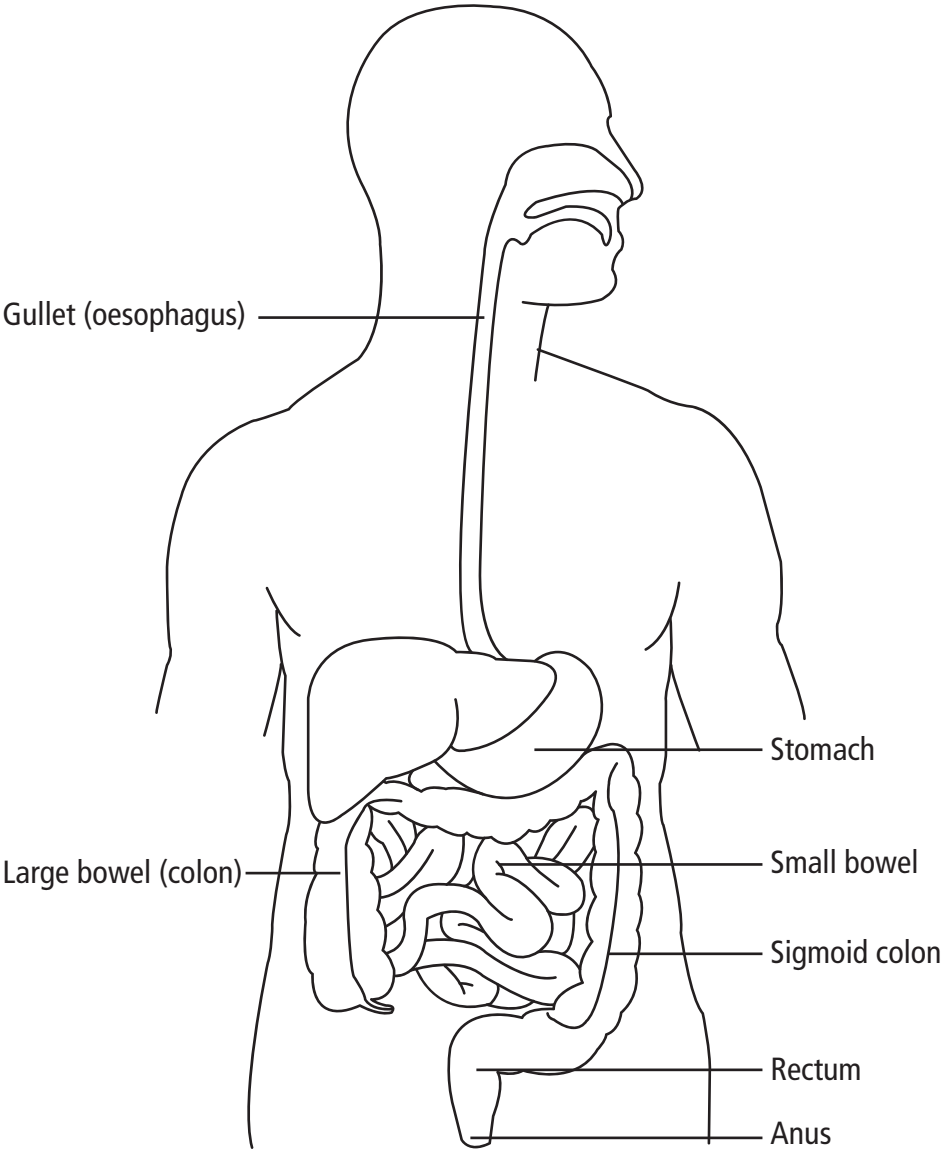
- blood tests
- a chest X-ray
- ECG (heart trace).

Your bowel may need to be empty for your operation. If so, we will give you some medication for this. You will also be offered some food supplements to drink to help build you up before surgery.

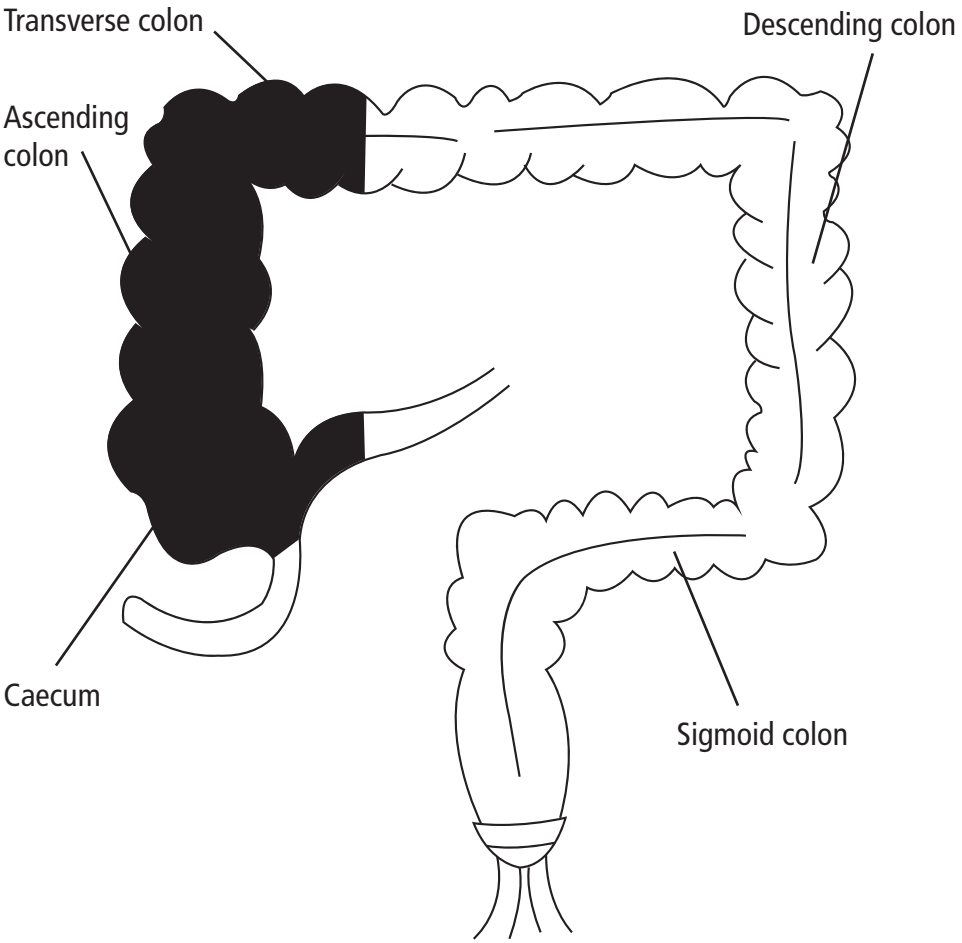
What will my operation involve?

The diagrams on the following pages show the position of the colon and rectum and the different operations available.

The position of the colon and rectum



Right hemicolectomy

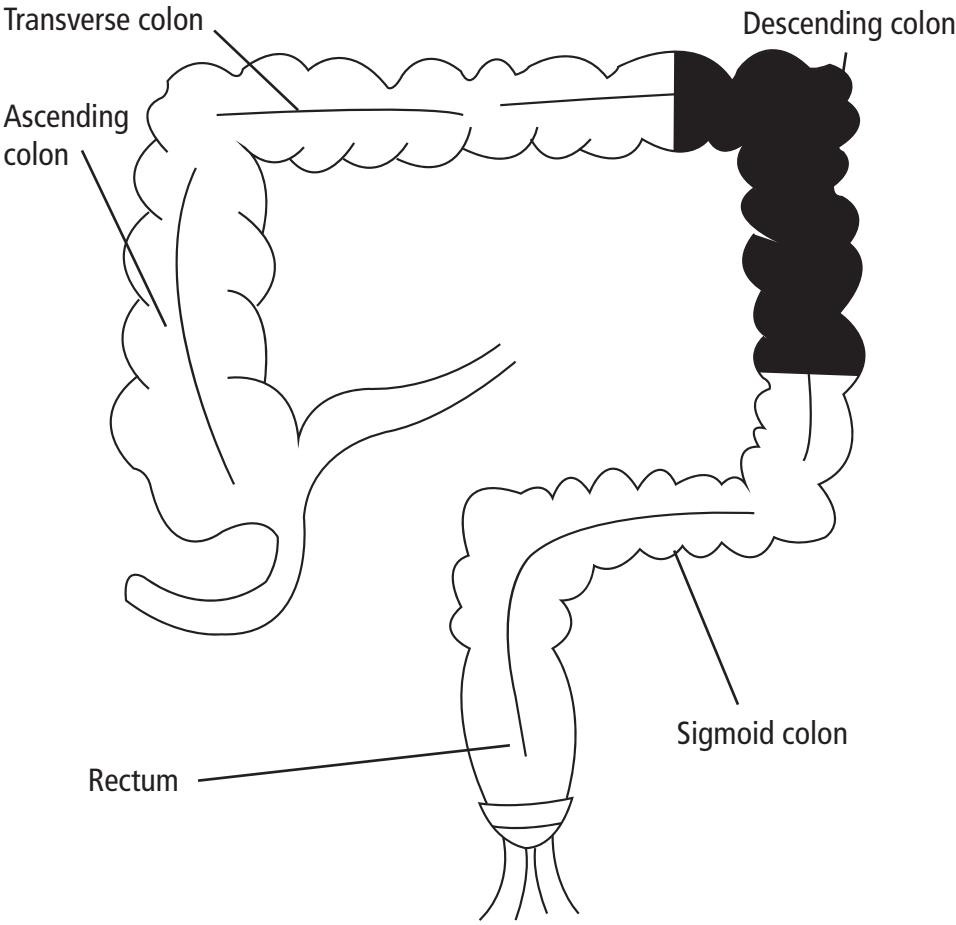


The large bowel

Operative details

The caecum, ascending colon and the right side of transverse colon are removed along with a few centimetres of the small bowel. The 2 ends of the bowel are joined back together. The shaded area shows the part of the bowel that is removed.

Left hemicolectomy

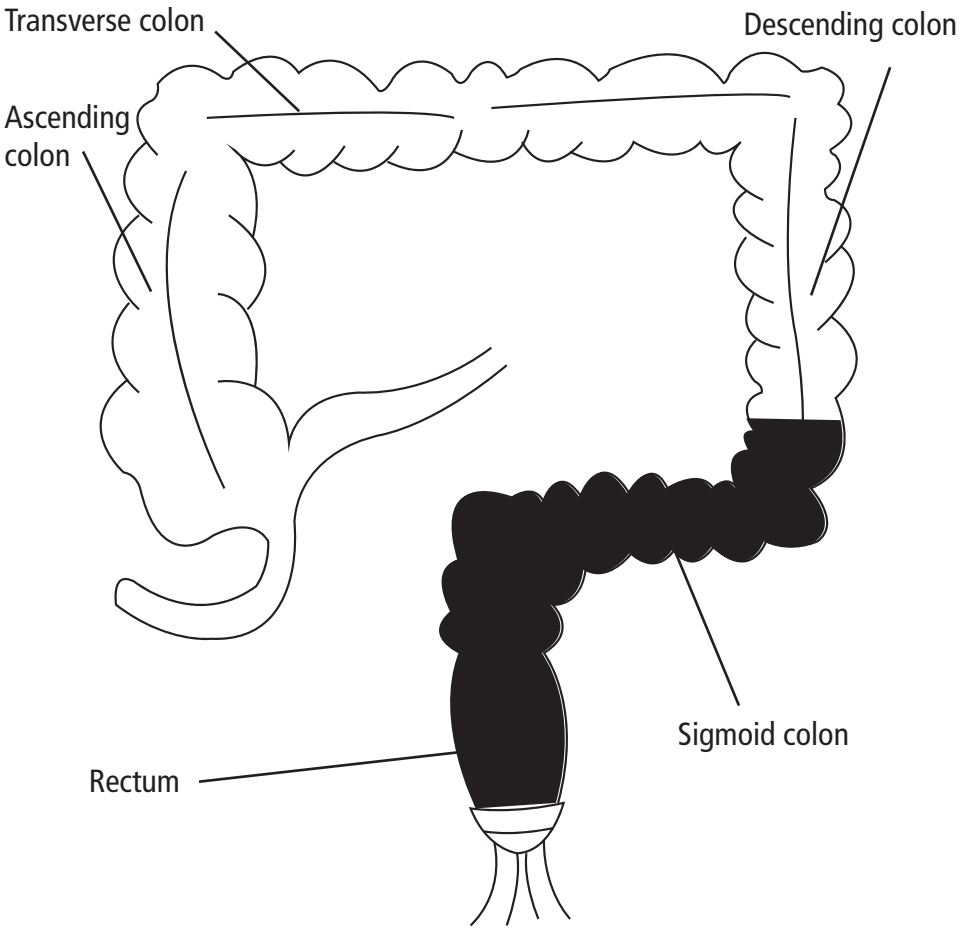


The large bowel

Operative details

The distal part of the transverse or descending colon is removed, and the 2 ends of the bowel are joined back together. The shaded area shows the part of the bowel that is removed.

Anterior resection

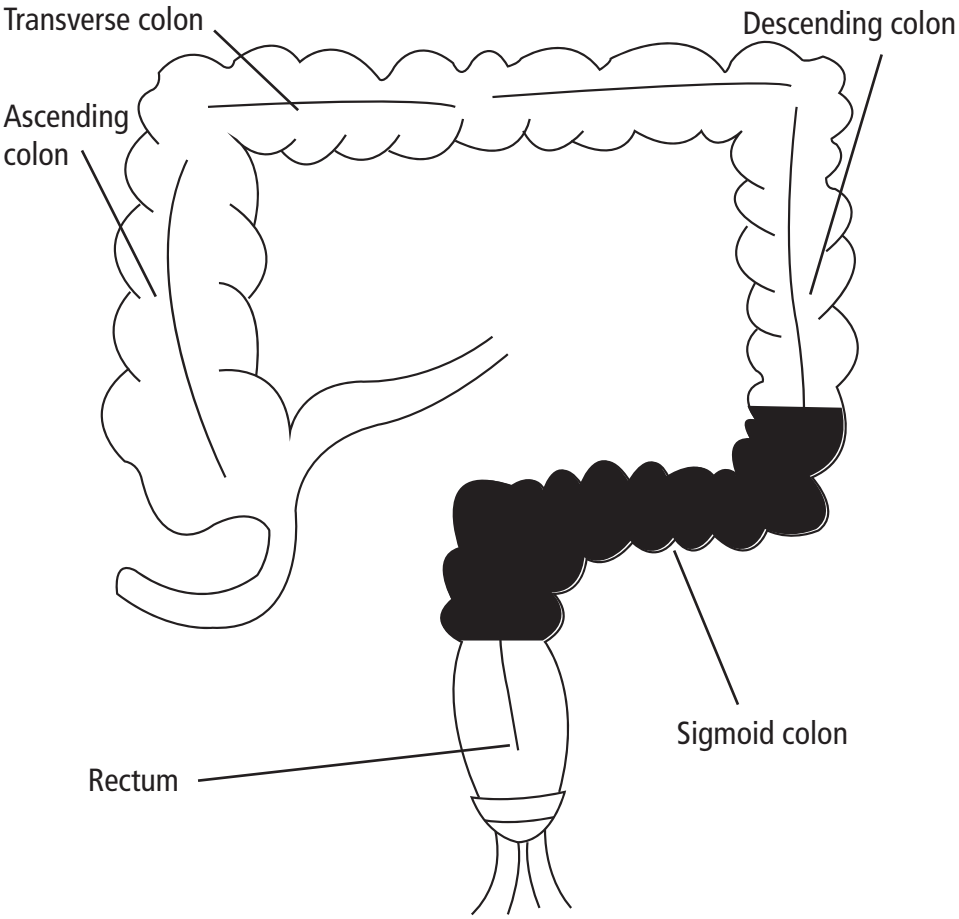


The large bowel

Operative details

The low part of the sigmoid colon or the high part of the rectum are removed. The two ends are then joined back together. The shaded area shows the part of the bowel that is be removed. Sometimes a loop of bowel is brought to the surface of the abdomen to rest the join. This is then put back during another operation.

Sigmoid colectomy

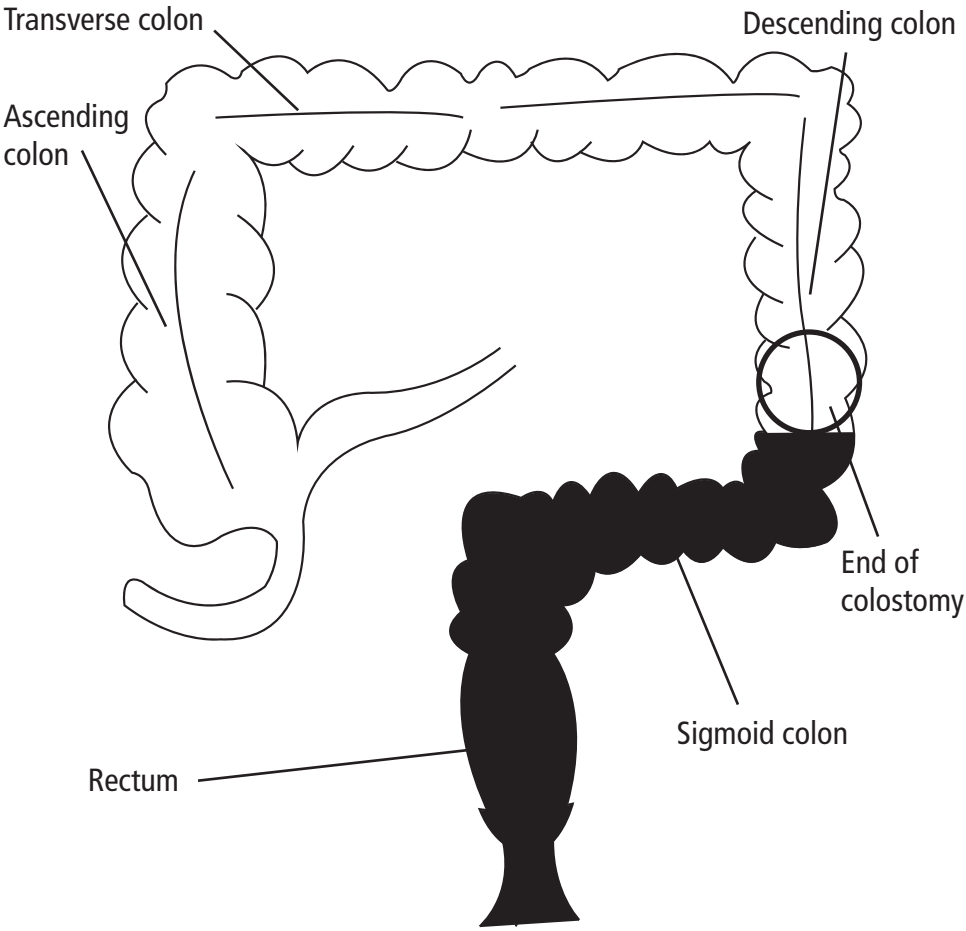


The large bowel

Operative details

The sigmoid colon is removed and the 2 ends of the bowel are joined back together. The shaded area shows the part of the bowel that is removed.

Abdomino-perineal resection of rectum



The large bowel

Operative details

The lower sigmoid colon, the rectum and the anus are removed. The shaded area shows the part of the bowel that is removed. You will then have a permanent colostomy.

What happens after my operation?

After your operation you will go to the recovery room so that the nurses can monitor you closely until you are returned to the ward.

When you arrive on the ward, the nurse will help to make you comfortable and check your blood pressure, pulse, respirations (breathing) and temperature regularly. The nurse will also check the wound on your abdomen.

As soon as possible the nurse will encourage and assist you to get up and move around. This is important to reduce the risks of blood clots, chest infections and pressure sores.

It is important that you tell the nurse if you have any severe pain. Before your operation you will see your anaesthetist and they will discuss the different types of pain relief available to help relieve pain following your bowel operation. This includes:

- **An epidural** - This is a type of medication given by inserting a small tube into your back. The anaesthetist will assess you and decide on the amount of this medication that should be given.
- **Patient controlled analgesia (PCA)** - This is a type of medication that is given through a drip in your arm. You are able to control the amount you receive, but you cannot overdose.
- **Rectus sheath** - A fine catheter is inserted during surgery into either side of the surgical wound and a local anaesthetic is put into the catheter to provide local pain relief.

You will be able to have sips of water to drink but while you are not eating and drinking, fluid will be given to you through a drip in your arm or hand.

You will be given anti-sickness medication and when you come back from the operating theatre you may have a tube in your nose that goes down your throat and into your stomach.This will not effect your breathing or speech and will be removed as soon as possible.

A catheter tube will be placed into your bladder to monitor your kidneys. This may be removed the following day or might need to stay for longer.

You may have a drain or tube inserted into your abdominal area. This is to remove any excess fluid. The draining fluid will be monitored and as it becomes less, the drain will be removed.

Your wound will have stitches or staples (metal clips) to keep it together while it heals. If these are not dissolvable they should be removed 10-14 days after your operation, either before you leave the hospital, or if you are discharged home before your stitches/staples are removed, at your GP surgery, or by your district nurse at home.

Most patients stay in hospital for a minimum of 2-3 days.

During your stay, if you or your family have any questions or concerns, please feel free to ask the ward nurses, doctors or the colorectal nurse. They will be pleased to help and put your mind at rest.

Clinical trials

During your treatment, you may be asked if you would like to take part in a clinical trial. Your involvement in this is completely voluntary. Your future treatment will not be affected in any way if you choose not to take part.

Prescriptions

After a cancer diagnosis you should not need to pay for prescriptions. Speak to your GP, pharmacist or nurse specialist for an exemption application form.

Citizens Advice Bureau

A Citizens Advice Bureau Cornwall/Macmillan Welfare Benefits Advisor is available on Tuesdays until 12.30pm in the Sunrise Centre for a 20 minute assessment. This is a drop in service. You can also contact us on 01872 672090 and leave a message.

Benefits

A benefits advisor from the Department of Work and Pensions visits the Sunrise Centre on a Wednesday morning between 10am and 12.30pm. Please arrange an appointment through Sandra Sandercock on 01872 258364.

Bowel Cancer Support Group

We have an online Cornwall Bowel Cancer Support Group at: www.beatingbowelcancer.org/cornwallsupportgroup - also on Facebook. This group is administered by Candy Coombe and Clare Ferris.

Useful information

Contacts:

Mount Edgecombe Hospice 01736 65711

Sunrise Centre 01872 258300

Leaflets:

Stoma leaflets

Body image after stoma surgery

Going home following your abdominal operation

Cancer Backup

Chemotherapy

Radiotherapy to the pelvis

Food ideas when eating becomes difficult

The cancer guide (Macmillan)

Stoma reversal

Rectal discharge

Dietary advice after your bowel operation

Rectal pain

Bowel Specialist Team

Enhanced recovery programme

Beating bowel cancer information pack

Regaining sexual activity after major bowel surgery - advice for men

Regaining sexual activity after major bowel surgery - advice for women

Keep high, stay dry Pelvic floor exercises for women

Keep high, stay dry Pelvic floor exercises for men

Web sites:

Bowel cancer - Information from NHS Direct
www.nhsdirect.uk

Bowel Cancer - Cancer Research UK
www.cancerresearchuk.org

Cancer - Beating Bowel Cancer
www.beatingbowelcancer.org

Cancer Backup - Large Bowel Cancer
www.cancerbackup.org.uk/cancertype/bowelcolonrectum/general/thelargebowel

Cancer Help UK - Colorectal Cancer (Bowel Cancer)
www.cancerhelp.org.uk/help/default.asp?page=2786

Cancer - Colon
www.coloncancer.org.uk

Cancer Research UK: Colorectal (bowel) cancer
www.cancerresearch.org/aboutcancer/specificcancers/15437

Bowel Cancer
www.digestivedisorders.orguk/leaflets/bowelcan.html

Cancer Help UK
www.cancerhelp.couk/help?page=346

Visiting times

All surgical wards	2.30pm - 4.30pm
	6.30pm - 8.30pm

Healthcare team

Your surgeon is _____

Your oncologist is _____

Your stoma nurse is _____

Your colorectal nurse is _____

If you would like this leaflet in large print, braille, audio version or in another language, please contact the General Office on 01872 252690

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Reviewed 07/2023 V5 **Review due 07/2026**