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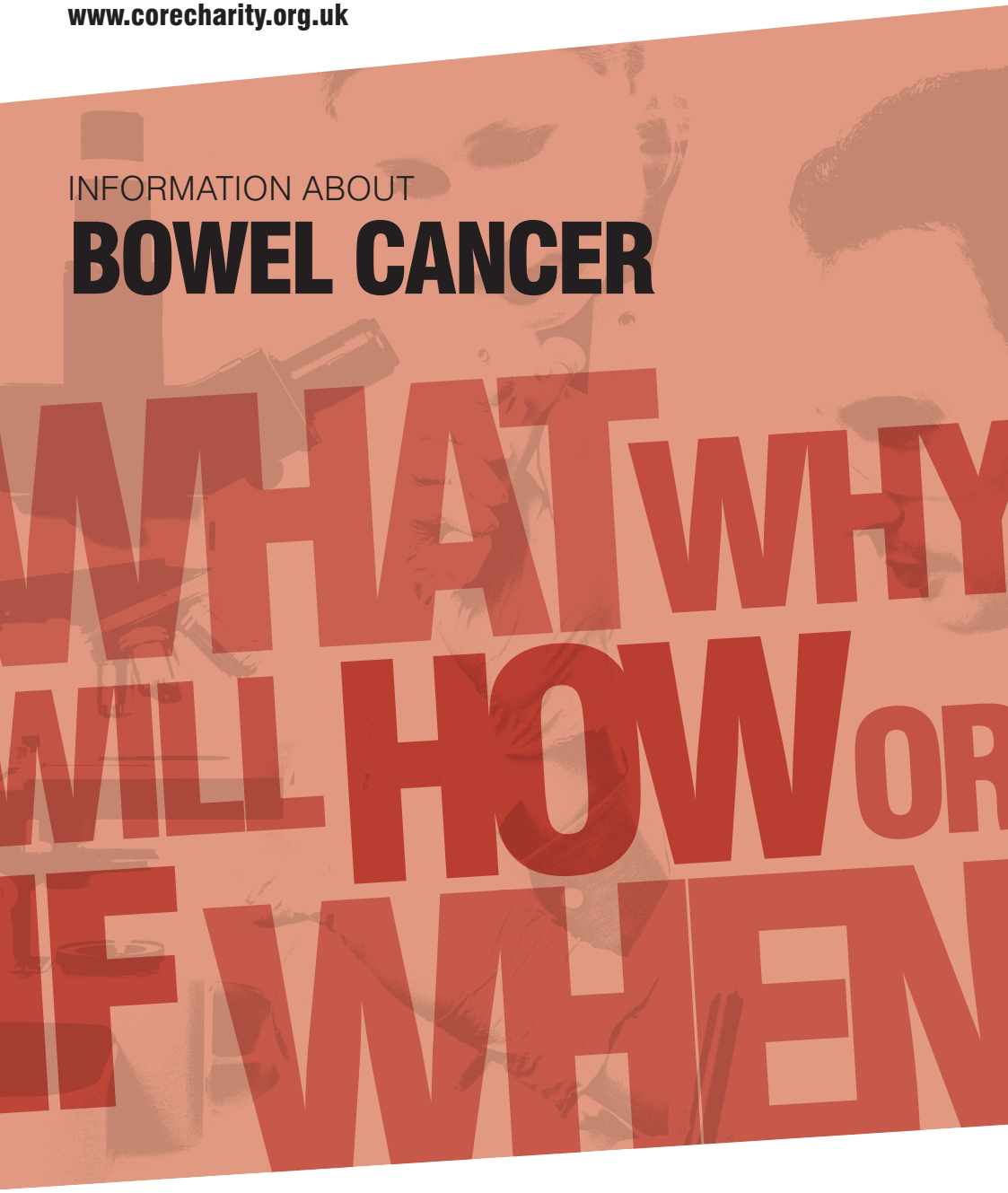
INFORMATION ABOUT

BOWEL CANCER



IN ASSOCIATION WITH:

core
FIGHTING GUT AND LIVER DISEASE

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BRITISH SOCIETY OF GASTROENTEROLOGY

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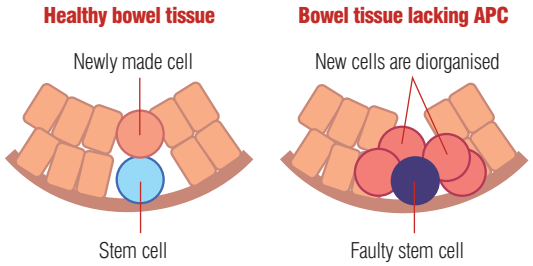
BOWEL CANCER

Each year approximately 40,000 people[1] in Britain are diagnosed with cancer of the bowel, as also called cancer of the colon and rectum. This makes it one of the commonest cancers in the UK[1].

Unlike some malignant tumours, bowel cancer can often be cured by surgery and new treatments are being introduced to make survival even more likely. The key message is that the earlier the bowel cancer is diagnosed, the greater the likelihood of cure.

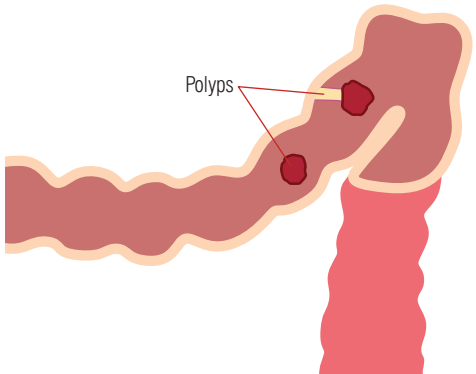
HOW DOES BOWEL CANCER START?

Throughout our lives, the lining of the bowel constantly renews itself. This lining contains many millions of tiny cells, which grow, serve their purpose and then new cells take their place. Each one of these millions of cells contains genes (such as APC seen below) that give instructions to the cell on how to behave. When genes behave in a faulty manner, this can cause the cells to grow too quickly, which eventually leads to the formation of a growth that is known as a polyp. This is the first step on the road towards cancer.



WHAT IS A POLYP?

A polyp, or more strictly a particular type of polyp called an adenoma, starts as a tiny bump on the inside of the bowel. At first, the genes give instructions for the polyp to grow in an orderly manner. Some polyps remain very small throughout their lives while others grow slowly larger. At this stage, the lump is still benign (non cancerous). Most polyps remain benign throughout life but about one in ten will turn into a cancer.[2] Broadly speaking, the larger a polyp, the more likely it is to become cancerous – although cancer is unusual if the polyp is less than 1cm in diameter. We believe that all malignancies of the bowel probably start off as benign polyps. We know that removing benign polyps can prevent cancer developing later[3].



HOW DOES A POLYP TURN TO CANCER?

In some polyps, the instructions that the genes give the cell on how to grow become increasingly disordered.

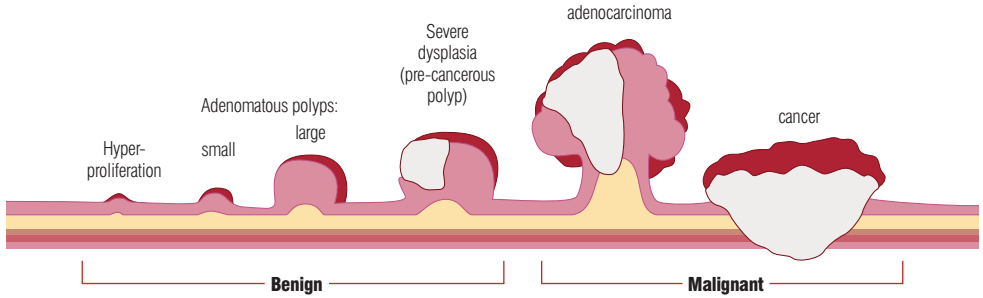
When this happens, the cells grow so quickly and in such a strange way that they grow not just on the lining of the bowel but into the wall of the intestines. At that stage we would say the polyp is no longer benign but has become malignant – in other words, the polyp has become a cancer.[4] As the tumour advances, it grows through the wall of the bowel to invade nearby tissues and can spread more widely throughout the body, particularly to the liver and the lungs. When cancer spreads far away from its primary site (in this case the bowel) to distant parts of the body, we call these 'secondaries', or more technically, 'metastases'.

WHAT ARE THE SYMPTOMS OF BOWEL CANCER?

The development of a bowel cancer from a polyp may take between five and ten years, and early on there may be no symptoms at all. The most common symptoms are

- bleeding from the bowel,
- a change in bowel habit, such as unusual episodes of diarrhoea or constipation and
- an increase in the amount of mucus in the stool6.

A bowel cancer can enlarge causing partial or complete blockage of the bowel leading to abdominal pain, constipation and bloating. Sometimes tiny amounts of bleeding may go unnoticed but result in the development of anaemia, which may cause tiredness and a decreased ability to work and exercise.



DOES EARLY DIAGNOSIS MAKE A DIFFERENCE?

Achieving a complete cure of bowel cancer depends on detecting it early on. The larger the growth and the more deeply and widely it has spread, the less likely it is to be curable[5]. If people wait too long before reporting symptoms, the opportunity to remove the cancer completely may be lost. An early diagnosis can also be made in the absence of symptoms by the use of screening.

AREN'T SOME OF THE SYMPTOMS SIMILAR TO THOSE OF IRRITABLE BOWEL SYNDROME (IBS)?

Yes they are and this can sometimes cause difficulty in making a diagnosis. A prolonged change in bowel habit lasting more than two or three months should always be investigated, and rectal bleeding is not a symptom of irritable bowel syndrome. Also, if there is a family history of bowel cancer that should make you consult your doctor earlier.

HOW IS THE DIAGNOSIS MADE?

Sometimes, the doctor will be able to detect a lump in the abdomen or on rectal examination but tests are usually needed. The most commonly used are[7]:

- Flexible sigmoidoscopy; after an enema a flexible telescope is passed through the anus, into the rectum and this can visualise the lowest half of the colon
- Colonoscopy is like a barium enema and a flexible telescope is passed through the anus into the rectum but the tube is long enough to examine the entire large bowel. The procedure is a little uncomfortable and most patients are offered an injection to ease any discomfort.
- Barium enema x-ray where laxatives are taken to empty the colon, before it is filled with a combination of barium and air to outline its lining.
- CT scanning; an x-ray procedure, which has the advantage, (which many people appreciate) of not involving a tube being passed through the anus. It is not yet as reliable as colonoscopy but its quality is steadily improving and it may become more used in years to come.

Both flexible sigmoidoscopy and colonoscopy have the advantage that a small sample or biopsy can be taken to look at under the microscope. The above tests are used in slightly different situations depending upon the symptoms that patients may have and the availability of the investigations.

WHAT HAPPENS ONCE CANCER IS DIAGNOSED?

If you are found to have bowel cancer, a team of specialists (a MDT, multi-disciplinary team) is there to help. You will be advised to have blood tests and scans to determine what is known as the stage (extent) of the cancer. Not only will the size of the primary tumour be assessed as fully as possible but the specialist will also want to know if there is any sign of secondary spread. Armed with all the relevant information they have gathered about the cancer, the specialists will decide how best to advise you on the most appropriate treatment.

HOW ARE CANCERS OF THE RECTUM TREATED?

Unless they are very small and can be removed by a local operation, most cancers of the rectum need to be very carefully checked pre-operatively by various scans. This will help decide whether or not the cancer should be shrunk down by radiotherapy. Cancers in the lower part of the rectum will be removed together with the immediately surrounding tissue, called the mesorectum. This operation that aims to cure the cancer is called total mesorectal excision, often abbreviated to TME[8].

HOW ARE CANCERS OF THE COLON TREATED?

Once a check has been made to ensure that there is no spread anywhere else, most colon cancers are treated by surgery. This will usually involve removing the cancer together with the lymph glands alongside the blood vessels supplying that section of the bowel. In most cases, the two ends of the bowel are joined together again (anastomosis) but if an emergency operation needs to take place, it may not be possible to join the bowel together straight away.

Once the bowel cancer and surrounding tissue have been removed they will be examined under the microscope and only then will it be possible to determine fully the stage of the cancer. If the cancer is confined to the bowel wall then surgical removal alone may be all that is needed. If there is any sign of spread to the local lymph glands a course of chemotherapy postoperatively may well be advised[8].

WILL A COLOSTOMY BE NECESSARY?

A cancer of the rectum very near the anal canal will be difficult to remove completely and in this situation it may be necessary to remove the rectum and the anus and make a permanent stoma or opening of the colon into the skin of the abdomen. This is called a colostomy. Fortunately, modern surgical techniques have made the need for a stoma to be much less likely nowadays than it used to be in the past[9].

WHAT HAPPENS AFTER SURGERY?

While you are recovering, the specialist team will meet to consider whether further treatment is advisable. Such decisions are based largely on the information we have about how advanced the primary cancer was. After the operation, the treatment options will be explained and if there is a need for further treatment such as chemotherapy then this will be arranged. The specialist team will wish to see you again in the months and years after surgery to check on how you are doing. Very often, you will be offered blood tests, scans or follow-up colonoscopy to detect whether the cancer has come back. If it does recur, there are still options for cure with positive results despite the reoccurrence.

WHAT IS ADVANCED BOWEL CANCER?

This is when the cancer has spread from the large bowel itself to other sites in the body. This may have already happened when the cancer is first diagnosed or may occur at a later date. The most common site for the cancer to spread is to the liver. Chemotherapy in this situation can be effective in controlling symptoms and prolonging life. Chemotherapy does not cure the disease and treatment is selected to provide a balance between the side effects and the benefits gained from treatment[10].

IF I HAVE HAD BOWEL CANCER, WHAT CAN I DO TO STOP IT COMING BACK?

A healthy life-style, a diet rich in fresh fruit and vegetables and a positive mental attitude together with attendance at follow up programmes seem to be the best advice.

ARE THERE ANY IMPLICATIONS FOR MY FAMILY?

If a person is young (40-50 years of age) when bowel cancer is diagnosed or if cancer is very common in the family, it may be that there is an inherited genetic abnormality. In such circumstances, brothers, sisters and children may be referred to a specialist for advice. If the risk of inherited disease is high enough some relatives may be advised to undergo a regular colonoscopy.[11]

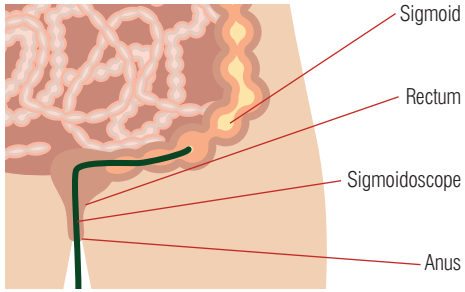
There are uncommon and inherited conditions including familial adenomatous polyposis (FAP) in which numerous polyps develop throughout the bowel and the cancer risk is greatly increased[12]. The family of these patients has to be carefully screened.

IS SCREENING FOR BOWEL CANCER BEING DONE?

Mass screening of the population for bowel cancer has now started in the UK[13]. Because polyps may bleed, one of the screening methods involves testing the stools chemically for traces of blood, then carrying out further investigations of the bowel if the test is positive. Eventually, this form of screening will be offered to everyone aged between 55 – 75 years. Screening is to examine the lower part of the bowel with a flexible sigmoidoscope in persons between the ages of 55-65. Trials of using these techniques on individuals who have no bowel symptoms have shown that more early cancers are being diagnosed and that early detection improves your chance of survival.

WHAT RESEARCH IS GOING ON?

New surgical techniques are being used to try and reduce the size of the abdominal wound and even remove cancers from within the bowel. Chemotherapy has certainly been increasingly successful over the last few years, as a number of new drugs have become available. Aspirin-like medicines are being studied for their effects on polyps and cancer. Vaccines against cancer and magic bullets to target treatment specifically against tumours are in the very earliest stages of development. Better tests for population screening are being investigated so that in the future it will be easier to identify cancer at an early stage.



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- Supports important medical research that looks for cures and for ways of improving the lives of patients;
- Provides evidence-based information that enables patients and families to understand and control their condition;
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You can find more information about digestive diseases and about Core's work by visiting our website at **www.corecharity.org.uk** or by calling **020 7486 0341** during office hours.

This leaflet was published by Core in 2014 and will be reviewed during 2016. If you are reading this after 2016 some of the information may be out of date. This leaflet was written under the direction of our Medical Director and has been subject to both lay and professional review.

This information booklet is produced by Core, the only national charity fighting all digestive diseases. Show your support for Core by making a donation today or by joining us as a Core Friend.

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