Patient information

Module 1 – Exploring the bowel

When we eat, food passes down the oesophagus or 'food pipe', into the stomach, and then into the small bowel. Most of the nutrients from our food are absorbed into our bodies in the small bowel. The large bowel, or colon, is a tube approximately 1.5 metres in length that connects the small bowel to the rectum and anus. It starts at the appendix and caecum on the lower right-hand-side of the abdomen, passes upwards to the underside of the ribs, and then across to the left-hand-side of the body and down into the pelvis. The colon is approximately 3 centimetres wide and has many important roles, including storage and excretion of the body's waste.

A range of problems can occur in the colon, including polyps and cancer. Polyps are common but are usually benign or non-malignant, which means that they do not spread to other parts of the body. Usually they cause no symptoms; however, it is important to identify them because they may become malignant as they enlarge, although this process can take several years. Although the great majority of polyps will never become malignant, it is believed that the majority of bowel cancers start off as small benign polyps. Bowel cancer is one of the most common malignancies, usually occurring in middle-aged or elderly people.

Various methods are available for examining the colon, including direct examination of the lining of the bowel using a colonoscope. The colonoscope is a 1.5 metre flexible tube, with a magnifier and a light on the end, which can be carefully passed along the length of the colon. If polyps are found, they can often be removed at the same time, or small samples, called 'biopsies', can be taken for further examination under the microscope to look for signs of inflammation or malignancy.

Module 2 – Preparing for colonoscopy

The need for a colonoscopy will be discussed in advance of the procedure. It can be suggested for a range of reasons including if the samples from bowel motions, sent in as part of the NHS Bowel Cancer Screening Programme, show traces of blood. This can mean that there are polyps in the bowel, as they bleed from time to time. There are other reasons for having a colonoscopy such as new bowel symptoms like noticing blood in bowel motions, or having diarrhoea for a few weeks.

Although colonoscopy is a very safe procedure there is a small risk of complications, and these will be discussed with you. Written information will usually be available for you to take away and read later. Nevertheless, you should feel free to ask the doctor or nurse any questions that you have about the procedure. If you are happy to go ahead with the colonoscopy, you will be asked to sign a consent form before the procedure is performed.

A specific date for the colonoscopy will be agreed with you. Before the procedure, there is a need to clear the bowel in order to have the best possible view. This involves adjusting your diet the day before and taking medication to clear the bowel. It is best not to plan any activities out of the house the day before your colonoscopy, as the bowel preparation medication will cause you to need very frequent trips to the toilet. You will be given the necessary medication to take and specific written instructions about what to do before the procedure. This may include adjusting or temporarily stopping other medications you may be taking (for example if you are diabetic). It is usually necessary to have nothing to eat or drink for several hours prior to the colonoscopy.

Module 3 – Having a colonoscopy

You will attend the endoscopy department on the day of your procedure, having taken your bowel preparation medication and having had nothing to eat or drink for several hours. Prior to the procedure, your details will be rechecked, including other medical problems, medications and possible allergies. Your written consent for the procedure will be taken if it has not already been done. You may be asked to undress and put on a hospital gown. For the procedure itself you will be taken into an endoscopy room, which contains an examination table and a range of equipment. The endoscopist and two nurses will usually be looking after you in the room.

The colonoscope itself is a flexible tube with a magnifier and light on the end. The tip of the colonoscope can be moved by adjusting wheels on the colonoscope handle. The colonoscope is connected to a computer, which then allows the endoscopic view to be displayed on a screen.

A thin plastic cannula will be inserted into a vein in your hand or arm, which will allow medications to be given. A small probe will be put on your finger, which allows the oxygen in your blood and your heart rate to be monitored. You may be given a painkiller and an antispasmodic drug to make sure that you are comfortable and relaxed during the procedure. In addition, you may also be offered a sedative or a painkilling gas called entonox; however, you may not find it necessary to take these. You may also be given extra oxygen into your nose through small tubes.

The endoscopist will explain what he or she is doing as the procedure is performed. The procedure will start with you lying on your left-hand-side with your knees bent towards your tummy. After any necessary medication has been put into your vein, the colonoscope is gently inserted into your rectum. From there it is slowly advanced around the colon. You may need to change position during the procedure to allow the scope to advance. The procedure is usually very well tolerated but can sometimes be uncomfortable or painful. You may also feel a sensation of trapped wind.

After the procedure you will return to the endoscopy recovery area. Once you are fully awake and alert you will be able to go home. The outcome of the colonoscopy will be discussed with you at the time and, if necessary, arrangements made to see you again. A report of the colonoscopy will be provided for you and your doctor. If you have had sedation for the procedure you will not be able to drive afterwards. It is best for you to be accompanied home.

Module 4 – Finding and removing polyps

Colonoscopy gives us the opportunity not only to identify polyps but also to remove them. The method of removal often depends on the type of polyp that is found. Some polyps grow out of the bowel wall on a stalk, and these are called pedunculated polyps. A metal loop (called a snare) can be passed down the colonoscope and positioned around the stalk. A small electric current flows through the snare to cut the polyp near to its base. The polyp can then be removed for further examination. Flat polyps may also occur. These lie close to the surface of the bowel wall and can also be removed by a snare; however, first, liquid must be injected under the polyp to lift it up and away from the bowel wall so that the snare can pass around it.

Polyps are usually benign, but may lead to cancer. Any polyps that are removed no longer have the potential to cause bowel cancer.