GESA Gastroenterological Society of Australia

Information about

Surgery for IBD

Inflammatory bowel disease (IBD) can often be managed with medication alone. However, a proportion of patients may require surgery, and the decision for this involves you and a multidisciplinary team of doctors, surgeons and other members of your IBD team.

Introduction

There are many medical options for the management of IBD. However, there are occasions when people need surgery to remove the diseased bowel. In some cases, surgery may also be the best option to treat the IBD. Surgery may be required if the person has insufficient response to medications; if there are areas of narrowing in the bowel (strictures); significant scarring in the intestines; and if there are other complications of the disease such as infection outside the bowel (abscesses), abnormal connections between different parts of the bowel or other organs (fistulae), and malnutrition.

Some types of surgery involve removal (resection) of parts of the bowel. There are different types of operations in which the bowel is removed and it is best to discuss all these options with your IBD team including specialised colorectal surgeons. An operation may be done in a single step or can involve multiple stages. It may be done via keyhole surgery (laparoscopy) or through a larger incision through the abdomen (laparotomy). Surgery may also be performed in a planned (elective) or urgent (emergency) nature. Some types of surgery do not involve removal of the bowel.

Each surgery has its own risks and benefits, but it is important to keep in mind that the chosen approach may not be the same for everyone.

What to expect before an operation

In the lead up to surgery, there may be a number of appointments you have to attend to ensure you are prepared in the best way. This may include more regular reviews with the IBD team, including surgeons, to ensure your general health and wellbeing. Other members of the team you may be introduced to include a stoma therapy nurse (in case a stoma [see below] is required) and a dietitian to optimise your nutrition. Before the operation, you will also meet your anaesthetist, and any assisting surgical doctors.

It is normal to feel nervous or anxious about your surgery. It is important that you raise any concerns or worries with your IBD team, who will support you along the way and address any issues that may arise before and after the surgery. You may find it helpful to have a family member or partner with you during these consultations.

Perianal disease

Abscess and fistula operation

Some complications of Crohn's disease do not require removal of the bowel. Abscesses (collections of infected fluid) around the anus usually need to be drained surgically. A thread, known as a seton, may need to be inserted into an open fistula (an abnormal small connection between different parts of the bowel, skin or nearby organs), to allow the infected fluid to drain out of the affected region and tissue healing. These may need to be repeated.

Other important notes

Stomas

Some people require a stoma following their surgery. A stoma is a surgically made opening in the abdominal wall to attach the small or large bowel. Bowel output then drains into a specially designed disposable collection bag. A stoma may be required in order to help with your recovery and may be temporary or permanent. Before your surgery, you should have the opportunity to discuss a stoma with your IBD team including surgeon and stomal therapy nurse. A stomal therapy nurse can discuss the different types of stomas, help you familiarise yourself with the equipment needed, and provide you with advice for optimal stoma care. You can also refer to the Life with a Stoma information sheet.

Advantages

Whilst it is a challenging time, proceeding with an operation may confer a number of benefits. It is important to remember that most people feel better, and disease is often easier to control with medications, after surgery.

Risks of surgery

Like any other intervention, there will be risks associated with your surgery. It may take some time to heal from an operation. Possible complications include leakage from any section of surgically joined bowel, infection and bleeding. Some people may need further procedures to fix any complication(s). You should feel free to discuss any questions, concerns, or alternatives to your surgery with your IBD team.

Bowel function and your IBD after surgery

The effect of surgery on bowel function can vary depending on the type of surgery and your disease. In some patients, bowel function may not become completely normal, and additional treatments like physiotherapy or other medications may be required. It is important to understand that medications to treat your IBD may still be required to reduce your chances of IBD recurrence.

Nutrition before and after surgery

Having good nutritional status before undergoing surgery is important to assist good surgical outcomes, such as a short hospital stay, fast recovery of bowel function and reducing risk of post-surgical complications. Often, medical nutrition drinks are recommended for 7-10 days leading up to planned surgery to optimise nutritional status to improve surgical outcomes. In people with Crohn's disease, a period of exclusive enteral nutrition (EEN) before planned surgery may also be recommended to improve both nutrition and reduce active disease. This may be used in preference to corticosteroids.

After surgery, your surgeon will gradually allow you to restart oral intake. Some patients may have narrowing at the join of the bowel due to swelling, and require a short-term low fibre diet to allow the site to heal and bowel movements to start. Your surgeon and dietitian will guide the degree and timeframe for fibre restriction, if needed.

Glossary of terms for different surgeries

There may be many new terms that you encounter in the lead up to your surgery. Some common surgeries performed for IBD are outlined below. These are understandably complex and should be discussed with your surgeon.

- **Surgical resection:** if a diseased area is very extensive or too damaged, it may be removed surgically (resection). The two healthy ends are then joined up ('an anastomosis). There are different terms for this surgery depending on which part of the bowel is removed.
- **Stricturoplasty:** procedure involving opening up narrowed segments of the bowel with a surgical cut to widen the narrowed segment and unblock the bowel. No bowel is removed during this surgery.
- **Ileocaecal resection/ileocaecectomy:** removal of the last part of the small bowel (terminal ileum) and the first part of the large bowel (caecum).
- **Right hemicolectomy:** removal of the right side of the colon (the ascending colon) allowing for joining up of the remainder of the large bowel.
- **Colectomy with ileostomy:** removal of the large bowel (colon) and formation of a stoma by bringing the small intestine out through an opening in the abdominal wall (stoma, or ileostomy).

- **Colectomy with ileo-rectal anastomosis (IRA):** removal of the large bowel and joining the healthy end of the small bowel to a healthy rectum. This avoids a stoma but may not be possible if the rectum is already very damaged.
- **Proctocolectomy and ileostomy:** removal of both the large bowel and the rectum resulting in the formation of a stoma. This is an irreversible procedure but will eliminate the risk of colorectal (large bowel) cancer.
- **Restorative proctocolectomy with ileo-anal pouch or ileal pouch-anal anastomosis (IPAA):** may occur in two or three stages. The aim of this operation is to remove the colon and rectum, then form a pouch with the small bowel (ileum) to serve as a reserve for storing stool. This pouch is joined to the anal canal to allow bowel motions to pass through the anus.

Acknowledgements:

This resource was developed in 2021 by the **GESA IBD Patient Information Materials Working Group** that included the following health professionals:

Mayur Garg (Chair, Gastroenterologist)
Aysha Al-Ani (Gastroenterologist)
George Alex (Gastroenterologist - Paediatric)
Vinna An (Colorectal Surgeon)
Jakob Begun (Gastroenterologist)
Maryjane Betlehem (Stomal Therapy Nurse)
Robert Bryant (Gastroenterologist)
Britt Christensen (Gastroenterologist)
Rosemary Clerehan (Educational Linguist)
Susan Connor (Gastroenterologist)
Sam Costello (Gastroenterologist)
Basil D'Souza (Colorectal Surgeon)
Alice Day (Senior Gastrointestinal Dietitian)
Kevin Greene (Consumer Representative)
Geoff Haar (IBD Pharmacist)
Emma Halmos (Senior Gastrointestinal Dietitian)
Tim Hanrahan (Gastroenterology Trainee)
Heidi Harris (IBD Clinical Nurse Consultant)
Katherine Healy (Senior Gastrointestinal Dietitian)
Simon Knowles (Specialist Gastrointestinal Psychologist)
Taryn Lores (Health Psychologist)
Raphael Luber (Gastroenterologist)
Antonina Mikocka-Walus (Specialist Gastrointestinal Psychologist)
Marion O'Connor (IBD Clinical Nurse Consultant)
Meera Rajendran (IBD Pharmacist)
Clarissa Rentsch (IBD Pharmacist)
Sally Stockbridge (CCA Consumer Representative)
Julie Weldon (CCA Consumer Representative)
Charys Winter (IBD Clinical Nurse Consultant)

The development of this resource was led and funded by GESA, independent from pharmaceutical or device companies.
It is possible that the above listed contributors have received funding from pharmaceutical or device companies in a different capacity.

Requests and enquiries concerning reproduction and rights should be addressed to: Gastroenterological Society of Australia (GESA)
Level 1 517 Flinders Lane Melbourne VIC 3000 | Phone: 1300 766 176 | email: gesa@gesa.org.au | Website: http://www.gesa.org.au