

## **Large Bowel (Colorectal )Surgery**

### **What is large bowel surgery?**

It is surgery to remove part of your large bowel. The large bowel connects the small intestine to the anus. It is also called the large intestine or colon

### **Why is the Procedure Performed?**

- Colon and rectal cancer
- Diverticular disease
- Trauma to colon
- Precancerous polyps
- Familial polyposis
- Inflammatory bowel disorder

### **What is laparoscopic bowel surgery?**

Laparoscopy, with small incisions and quick recovery, has revolutionized abdominal surgery. Although mostly applied to patients with benign disease, minimally invasive surgery is now being used in patients with malignant disease as well.

### **SURGICAL TECHNIQUE**

Preoperative preparation for laparoscopic colorectal surgery is identical to preparation for open colectomy, including mechanical bowel preparation, perioperative broad-spectrum prophylactic antibiotics, and venous thromboembolism prophylaxis.

Laparoscopic surgery involves insufflating the abdomen with carbon dioxide gas, which pushes the abdominal wall away from the intestine and allows the surgeon to work

Dissection is performed with specially constructed thin instruments that are placed into the abdomen through small incisions, referred to as ports. A miniature magnifying video camera is inserted into the abdomen, and the surgeon and assistants view the procedure on monitors in the operating room

Patient positioning during laparoscopic bowel surgery allows the patient to be "airplaned" to provide gravitational exposure of the operative field. Use of leg stirrups maintains the hips in a flat position and provides access to the anal canal for stapler insertion or for surgical access to the colonic flexures.

### **What are the benefits of laparoscopy?**

Laparoscopic-assisted surgical techniques allow mobilization of relatively large lengths of mesentery and management of major vascular pedicles. Laparoscopic bowel resection is associated with a decreased perioperative stress response, fewer cardiopulmonary complications, shorter duration of stay, and a shorter convalescence.

The shorter duration of hospitalization is related to a shortened period of ileus and earlier resumption of oral intake. Ileus is caused by many factors, including intraoperative intestinal manipulation, pain, and narcotic usage. It is thought that all these factors are reduced in laparoscopic surgery, and that this accounts for the earlier resolution of ileus following minimally invasive surgery.

Although early feeding regimens and early ambulation programs have been transferred to open colectomy procedures as well, laparoscopic colectomy is associated with a reduction of at least 2 hospital days compared with open surgery. Laparoscopic resection surgery patients are fully recovered in a fortnight, however open surgery may take a while.

### **What are the disadvantages of laparoscopy?**

Longer operating time which gets better as the surgeon's experience improves  
Inadvertent injury to adjacent organs such as adjacent bowel or a blood vessel, however this is rare.

### **What is enhanced recovery?**

This is a combined multi-professional approach to recover you after surgery involving active physiotherapy, good pain relief and early mobilisation. You start drinking fluids immediately after surgery and within a day may be allowed to eat what you like.

### **What happens when you go home?**

Since we send you home early a nurse practitioner will phone you at home for the first few days and check on your progress.

### **How do you care for your stoma?**

Stoma nurses at the hospital are the point of contact and they continue looking after you in the early days when you are at home providing support and advise.

### **Does laparoscopic surgery take away all the cancer?**

Yes it does. There is no compromise on cancer surgery

Arumugam PJ, Bevan L, MacDonald L, Watkins AJ, Morgan AR, Beynon J, Carr ND.

A Prospective audit of risk factors and complications of stomas.

*ANZ J. Surg* 2002; 72: ( *Suppl*) A 26

Poster presentation at the Joint annual meeting of Royal Australasian & New Zealand College of Surgeons with RCS Edinburgh, Adelaide, May 20