聖保祿醫院
St. Paul's Hospital

Procedure Information Sheet - Laparoscopic Colorectal Resection

Introduction

- Intestine consists of small and large intestine (including ascending, transverse, descending and sigmoid colon and rectum). Large intestine is mainly responsible for water absorption and formation of solid stool which is stored in rectum and then passed out in anus.
- Laparoscopic colorectal resection is a major operation in which part of whole of the colon or rectum is removed with the use of laparoscopic technique. It is a minimally invasive procedure which smaller incisions is made, with less post-operative pain and associated complications, and earlier return of bowel function.

Indications

Colorectal cancer, large colorectal polyp, colonic volvulus etc.

Procedure

1. The operation is performed under general anaesthesia.
2. Small incisions are made over the abdomen for insertion of laparoscope and instruments.
3. Carbon dioxide is insufflated into the abdominal cavity.
4. Surgeon localizes the tumor/site of pathology and excises the diseased segment of colon using laparoscopic instruments.
5. The remaining ends of bowel are usually rejoined when it is appropriate. Otherwise, a stoma may be performed as part of the operation, either temporarily or definitively.
6. Depending on the nature of the disease and individual anatomy, it may be impossible or unsafe to proceed further with laparoscopic technique; the operation will then have to be converted to conventional open surgery.

Pre-operative preparation

1. Pre-operative interview with doctor in charge on the diagnosis, option of management, nature of operation and possible risks. (Read through and understood this Patient Information Leaflet). Completed the inform consent form.
2. Pre-operative work up: physical examination, blood tests, chest X ray and electrocardiogram (ECG).

3. Bowel preparation:
   - Low residue diet 3 days before operation, avoiding high roughage food such as vegetables, fruits and cereals.
   - Fluid/congee diet 2 days before operation.
   - Bowel cleansing agent may be prescribed on the day before operation; clear fluid (non-dairy products) is allowed.
4. Pre-operative anesthetic assessment.
5. Shaving of appropriate operative site and bathing.
6. Keep fast for 6-8 hours before operation.
7. Urinary catheterization may be required, otherwise empty bladder before surgery.
8. May need pre-medications and intravenous drip.
9. Antibiotics prophylaxis or treatment may be required.
10. Inform your doctors about drug allergy, your regular medications or other medical condition.

Possible risks and complications

A. Complications related to anaesthesia.

B. Complications related to procedure: (Item 1-3: may require further major operation and are associated with an overall mortality up to 5%).

1. Complications relate to bowel preparation (renal failure/electrolyte disturbance).
2. Surgical emphysema and incisional hernia.
3. Damage to spleen in case of splenic flexure mobilization.
4. Injuries to the urinary bladder and ureter.
5. Anastomotic bleeding, leakage or disruption (3-10%), leading to reoperation, stoma and anastomotic stricture.
6. Intra-abdominal bleeding and collection.
7. Bladder dysfunction (~20%); temporary in most cases (in rectal cancer surgery), urinary tract infection.
8. Damage by trocars: Urinary bladder, gastrointestinal tract or vessels.
9. Transient faecal incontinence, intestinal obstruction (prolonged ileus/adhesive obstruction).
10. Sexual dysfunction, impotence (30-40%, in rectal cancer surgery).
11. Wound infection (~10%).

12. Fatal air-embolism.
13. Port site recurrence (local or systemic or both).
14. Deep vein thrombosis.
15. Pulmonary embolism.

Post-operative information

1. May feel mild throat discomfort or pain because of intubation.
2. Mild discomfort or pain over abdomen, shoulder or neck is common because of gas insufflations. Inform nurses or doctor if pain is severe.
3. Nauseas and vomiting are common, inform nurses if severe symptoms occur.
4. Pain relief is usually by patient-controlled analgesia or epidural analgesia.
5. Follow up on schedule as instructed by your doctor.

Hospital care	Home care after discharge
Wound care 1. Wound is covered by sterile dressing after operation. 2. Keep wound dressing dry; staples or clips will be removed on post operation day 7-14. 3. Avoid kinking or knotting of surgical tubes such as naso-gastric tube, urinary catheters and intravenous catheters. 4. Abdominal drain may be placed for removal of dirty fluid and it is usually removed on day 2-5 depending on the content and volume of fluid drained.	***Wound care*** 1. Mild wound pain is common. 2. Taking shower is allowed but remembers to keep dressing dry.
Activity 1. Early ambulation and deep breathing exercise can help reduce the chance of chest infection or pulmonary embolism.	***Activity*** 1. Can resume normal daily activity within 1-2 weeks (according to individual situation). 2. Avoid lifting heavy objects, bending or extending the body excessively in the first 4 weeks.
Diet 1. Diet is restricted in the immediate post-operative period; it is gradually resumed (fluid, soft and normal diet) when bowel function resilience. 2. Bowel opening is loose and frequent in early period but condition will improve with time.	***Diet*** 1. As instructed by your doctor.

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Remark

The above mentioned procedural information is not exhaustive, other unforeseen complications may occur in special patient groups or different individual. Please contact your physician for further enquiry.

Reference: http://www21.ha.org.hk/smartpatient/tc/operationstests_procedures.html

I acknowledge that the above information concerning my operation/procedure has been explained to me by Dr. _____. I have also been given the opportunity to ask questions and receive adequate explanations concerning my condition and the doctor's treatment plan.

Name:

Pt No.: Case No.:

Sex/Age: Unit Bed No:

Case Reg Date & Time:

Attn Dr:

Patient / Relative Signature: _____

Patient / Relative Name: _____

Relationship (if any): _____

Date: _____