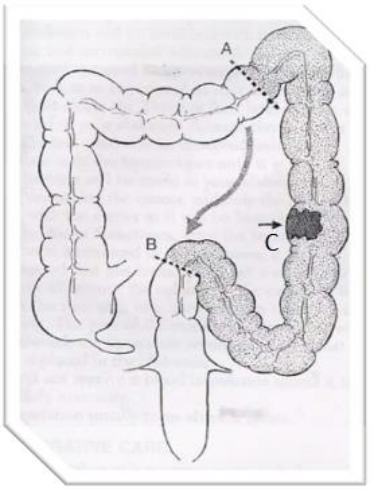
播道醫院
Evangel Hospital

Information on Laparoscopic Colorectal Resection

Introduction



1. Intestine consists of small and large intestine (including ascending, transverse, descendingand 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 though the anus.
2. Laparoscopic colorectal resection is a major operation in which part or whole of the colon or rectum is removed with the use of laparoscopic technique. It is a minimally invasive procedure, which smaller incisions are made, with less postoperative pain and associated complications, and earlier return of bowel function.

Procedure

1. The operation is performed under general anaesthesia
2. Small incisions are made over the abdomen for insertion of laparoscope.
3. Carbon dioxide is insufflated into the abdominal cavity.
4. Surgeon localizes the tumor (C) and excises the diseased segment of colon (A to B) 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.

Risks

A. <u>Anaesthesia related complications</u>

1. Cardiovascular: acute myocardial infarction, cerebral accidents, deep vein thrombosis, massive pulmonary embolism, etc.
2. Respiratory: atelectasis, pneumonia, asthmatic attack, exacerbation of chronic obstructive airway disease, etc.
3. Allergic reaction and anaphylactic shock.

B. <u>Procedure related complications</u>

(Item 1-3: may require further major operation and are associated with an overallmortality of up to 5%)

1. Complications related 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%) / Fatal air-embolism / Port site recurrence (local or systemic or both).

222 九龍亞皆老街 Argyle Street, Kowloon
☎ 2711 5222 🖷 2760 3484
info@evanhosp.org.hk
www.evangel.org.hk

MI-CND0071Aug23v04E

Information on Laparoscopic Colorectal Resection

Preoperative preparation

1. Sign consent after doctor explained the diagnosis, treatment options, nature of operation and possible risks. (Read through and understood this Patient Information Leaflet).
2. Pre-operative work up: physical examination, blood tests, chest X ray and electrocardiogram (ECG).
3. Bowel preparation: Low residue diet 3 days pre-op, avoid high roughage food such as vegetables, fruits and cereals. Fluid/congee diet 2 days pre-op. Bowel cleansing agent may be prescribed 1 day pre-op; clear fluid (non-dairy) allowed.
4. Pre-operative anesthetic assessment / Shaving of operative site and bathing.
5. Keep fast for 6 hours before operation to avoid risk of aspiration.
6. Change to OT clothes ; empty bladder before transfer to OT, otherwise urinary catheterization may be required
7. May need pre-medications intravenous drip, and antibiotics prophylaxis.
8. Inform your doctors about drug allergy, your regular medications or other medical conditions.

Postoperative events

A. General

1. May feel mild throat discomfort or pain because of intubation.
2. Mild discomfort or pain over abdomen, shoulder or neck is common after gas insufflations. Inform nurses if severe.
3. Nausea and vomiting are common; inform nurses if severe.
4. Pain relief is usually by patient-controlled analgesia or epidural analgesia.

B. Wound care

1. Keep sterile dressing dry.
2. 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 placed for removal of fluid is removed on day 2-5 depending on the condition and volume of drainage.

C. Activity

Early ambulation and deep breathing exercise can reduce chance of chest infection or pulmonary embolism.

D. Diet

1. Restricted in early post-op period; Resumed gradually (fluid, soft and normal) when bowel function returns.
2. Bowel opening is loose and frequent initially, but will improve with time.

Things to take note after discharge

A. Diet There is no need to restrict diet; drink more water and take a high fibre diet to allow easy bowel opening.

B. Wound care

1. Mild wound pain is common.
2. Taking shower is allowed, but remember to keep dressing dry.

C. 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.

D. Follow up

1. Remember the dates to remove the stitches or clips in the general outpatient clinic.
2. Follow up at specialist clinic as scheduled for pathology result and assessment.

Remarks

This is general information only and the list of complications is not exhaustive. Other unforeseen complications may occasionally occur. In special patient groups, the actual risk may be different. For further information please contact your doctor. Evangel Hospital reserves the right to amend this leaflet without prior notice. We welcome suggestions or enquiries on the information provided in this leaflet. Please contact our Healthcare professionals so that we could follow up and make improvement.

Reference

Hospital Authority: *"Laparoscopic Colorectal Resection" (2020)*
Smart Patient: https://www.ekg.org.hk/pilic/public/surgery_pilic/surgery_laparoscopiccolorectalresection_0163_eng.pdf (24-07-2023)

222 九龍亞皆老街 Argyle Street, Kowloon
☎ 2711 5222 🖷 2760 3484
info@evanhosp.org.hk
www.evangel.org.hk