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Open Proctocolectomy with Ileal Pouch-Anal Anastomosis (IPAA)

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Preference Card

- Number 10-blade scalpel with handle
- Abdominal wall retractor (surgeon preference, Bookwalter, Thompson, Balfour, large or extra-large wound protector)
- Toothed and non-toothed forceps (Adson-Brown, DeBakey, rat tooth, Bonney)
- Curved Metzenbaum and Mayo scissors
- Electrocautery, vessel sealing device
- Kocher, Allis, and Babcock clamps
- Kelly, mosquito hemostats
- Retractors (Richardson, Deaver, army navy)
- Needle drivers
- Linear cutting stapler
- Curved cutting stapler (Contour®)
- Circular stapler 28–33 mm
- Flexible sigmoidoscope
- Suction
- Sutures
  – 2.0/3.0 polyglactin or catgut
  – 3.0 polydioxanone
  – 4.0 polyglecaprone
  – Skin stapler or 2-0 nonabsorbable sutures for skin closure

Patient Positioning/Operating Room Setup

- Place patient in modified lithotomy position with legs in stirrups to provide easy access to perineal region; thighs are flexed (see Fig. 11.1).
- Ensure that the patient is low enough on the table to have access to the rectum.
- Abduct and secure arms on padded arm boards (max 90°).
- Mark colostomy site bilaterally; ideally this should be done preoperatively with the patient awake in the sitting and supine position; however in emergency cases where this is not possible, it is done in the operating room at the time of surgery – bilateral markings are used in case there are any issues with reach.
- Prep and drape both legs, the underbuttock area, and the abdomen.
- The surgeon is positioned to patient's right; the assistant is to the patient's left; the second assistant can stand either to the left of the first assistant or between the patient's legs (see Fig. 11.2).
- The scrub nurse is to the right of the surgeon.
- Insert Foley catheter.

Nodal Points

Type of Incision

- Midline laparotomy (see Fig. 11.3)

Approach

- Obtain controlled entry into the abdomen. If previous midline scar, attempt entry in an area above or below the scar to avoid any underlying adhesions.
- Perform lysis of adhesions as needed to obtain good exposure.
- Culture any fluid if present.

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- Position the abdominal wall retractor.
- Explore the abdomen to assess for undiagnosed pathology.

Dissection, Resection, and Reconstruction Steps

Dissection, resection, and reconstruction steps are similar to the laparoscopic approach as described in Chap. 18.

Main steps are as follows:

- Pancolonic mobilization
  - Ascending colon mobilization
  - Hepatic flexure mobilization
  - Transverse colon mobilization
  - Splenic flexure mobilization
  - Descending colon mobilization
- Rectal mobilization down to the pelvic floor.
- Identify and preserve the ileocolic artery and vein.
- Divide the mesocolon close to the bowel wall.
- Transect the terminal ileum and the distal rectum.
- Construct the ileal J-pouch.
- Perform the ileal J-pouch-anal anastomosis.
- Create a diverting loop ileostomy.

Access Reader Checklist Appendix

READER CHECKLIST
Open Proctocolectomy with Ileal Pouch Anal Anastomosis

PREFERENCE CARD

▶**Instruments**
__Number 10-blade scalpel with handle
__Abdominal wall retractor (surgeon preference: Bookwalter, Thompson, Balfour, large or extra-large wound protector)
__Toothed and non-toothed forceps (Adson Brown, Debakey, Rat tooth, Bonney)
__Curved Metzembaum and Mayo scissors
__Electrocautery, vessel sealing device
__Kocher, Allis and Babcock clamps
__Kelly, Mosquito hemostats
__Retractors (Richardson, Deaver, army navy)
__Needle drivers
__Linear cutting stapler
__Curved cutting stapler (Contour®)
__Circular stapler 28-33mm
__Flexible sigmoidoscope
__Suction

▶Sutures
__2.0/3.0 polyglactin or catgut
__3.0 polydioxanone
__4.0 polyglecaprone
__Skin stapler or 2-0 non-absorbable sutures for skin closure

PATIENT POSITIONING/ OPERATING ROOM SETUP

▶Patient Positioning
__Place patient in modified lithotomy position with legs in stirrups to provide easy access to perineal region
__Thighs flexed
__Ensure patient is low enough on table to have access to rectum
__Abduct and secure arms on padded arm boards (max 90 degrees)
__Mark colostomy site bilaterally
Ideally should be done pre-operatively with patient awake in sitting and supine position, but in emergency cases where this is not possible, should be done in operating room at time of surgery. Bilateral markings used in case of any issues with reach
__Prep and drape both legs, under buttock area and abdomen

▶Operating Room Setup
__Surgeon positioned to patient's right
__Assistan tto patient's left
__Second assistant can stand either to left of first assistant or between patient's legs
__Scrub nurse to right of surgeon
__Insert Foley catheter

NODAL POINTS

▶**Type of Incision**
__Midline laparotomy

▶**Approach**
__Obtain controlled entry into the abdomen.
__If previous midline scar, attempt entry in area above or below scar to avoid underlying adhesions
__Perform lysis of adhesion,s as needed, to obtain good exposure
__Culture any fluid, if present
__Position abdominal wall retractor
__Explore abdomen to assess for undiagnosed pathology

▶**Dissection, Resection, and Reconstruction**
Dissection

Dissection, resection, and reconstruction steps are similar to laparoscopic approach as described in Chapter 18.

Main Steps
__Pancolonic mobilization:
  __Ascending colon mobilization
  __Hepatic flexure mobilization
  __Transverse colon mobilization
  __Splenic flexure mobilization
  __Descending colon mobilization

Main Steps
__Rectal mobilization down to pelvic floor
__Identify and preserve ileocolic artery and vein
__Divide mesocolon close to bowel wall
__Transect terminal ileum and distal rectum
__Construct ileal J-pouch
__Perform ileal J-pouch-anal anastomosis
__Create diverting loop ileostomy