Open Low Anterior Rectal Resection with Diverting Loop Ileostomy

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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, St Marks retractor)
- Needle drivers
- Linear cutting stapler
- Curved cutting stapler (Contour®)
- Circular stapler 28–33 mm
- Flexible sigmoidoscope
- Ileostomy rod and stoma appliance
- Suction
- Sutures
  - 2.0/3.0 polyglactin or catgut
  - 3.0 polydioxanone
  - 1 looped polydioxanone
  - 4.0 polyglecaprone
  - Skin stapler or 4.0 absorbable sutures for skin closure

Patient Positioning/Operating Room Setup

- Modified lithotomy position with legs in stirrups to provide easy access to perineal region, thighs are flexed; patient's buttock slightly off the lower edge of the bed to allow access to the rectum (see Fig. 11.1).
- Abduct and secure arms on padded arm boards (max 90°).
- 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.
- The scrub nurse is to the right of the surgeon (see Fig. 11.2).
- Foley catheter is inserted.

Nodal Points

Type of Incision/Port Locations

- Midline laparotomy (see Fig. 12.2)

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 if needed to obtain good exposure.
- Position the abdominal wall retractor, and explore the abdomen for any undiagnosed pathology.
- Protect and pack the small bowel using moist towels to the right of abdomen.

Dissection, Resection, and Reconstruction

Dissection, resection, and reconstruction steps are similar to the laparoscopic approach as described in Chap. 16.

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Main steps are summarized as follows:

- Mobilization of the descending colon
- Mobilization of the splenic flexure
- Identification and ligation of the inferior mesenteric artery and vein at their origin
- Total mesorectal excision
- Resection of rectum and descending colon at designated points
- Creation of the colorectal anastomosis
- Creation of loop diverting ileostomy

Access Reader Checklist Appendix

☑ READER CHECKLIST
Open Low Anterior Rectal Resection with Diverting Loop Ileostomy

✓ 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, DeBackey, 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, St Marks retractor)
__Needle drivers
__Linear cutting stapler
__Curved cutting stapler (Contour⊠)
__Circular stapler 28-33mm
__Flexible sigmoidoscope
__Ileostomy rod and stoma appliance
__Suction

►Sutures
__2.0/3.0 Polyglactin or catgut
__3.0 polydioxanone
__1 looped polydioxanone
__4.0 polyglecaprone
__Skin stapler or 2-0 non-absorbable sutures for skin closure

✓ NODAL POINTS

►**Type of Incision**
__Midline laparotomy

►**Approach**
__Obtain controlled entry into the abdomen.
__If prior midline scar, attempt entry in area above or below scar to avoid underlying adhesions
__Perform lysis of adhesions, if needed, to obtain good exposure
__Position abdominal wall retractor and explore abdomen for undiagnosed pathology
__Protect and pack small bowel using moist towels to right of abdomen

✓ PATIENT POSITIONING/ OPERATING ROOM SETUP

►Patient Positioning
__Modified lithotomy position with legs in stirrups to provide easy access to perineal region
__Thighs are flexed, buttock slightly off lower edge of bed to allow access to rectum
__Abduct and secure arms on padded arm boards (max 90 degrees)
__Prep and drape both legs, unde rbuttock area and abdomen

►Operating Room Setup
__Surgeon positioned to patient's right
__Assistant to patient's left
__Second assistant can stand either to left of first assistant or between patient's legs
__Scrub nurse to right of surgeon
__Foley catheter inserted

►**Dissection, Resection, and Reconstruction**

Dissection, resection and reconstruction steps similar to laparoscopic approach as described in Chapter 16

Main Steps
__Mobilize descending colon
__Mobilize splenic flexure
__Identify and ligate inferior mesenteric artery and vein at origin
__Total mesorectal excision
__Resect rectum and descending colon at designated points
__Create colorectal anastomosis
__Create of loop diverting ileostomy