Hartmann's Procedure

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Indications

- Complicated diverticulitis (i.e., perforation) or recurrent diverticulitis
- Rectosigmoid carcinoma (management of obstruction, perforation, or bleeding in an emergency setting or for cure or palliation in an elective situation)
- Other situations necessitating sigmoid resection in which conditions are not favorable for anastomosis (i.e., patients who are hemodynamically unstable during the operation, who are malnourished, who are severely immunocompromised, or who have poor fecal continence).

Essential Steps

1. Midline incision.
2. Explore the abdomen.
3. Incise the white line of Toldt to free the sigmoid colon and descending colon from its peritoneal attachments.
4. Identify and protect the ureters.
5. Divide the colon proximally and distally to the pathology.
6. Ligate the mesenteric vessels and intervening mesentery.
7. Remove the specimen.
8. Create ostomy site and deliver the proximal colon.
9. Close the abdomen.
10. Mature the colostomy.

Note These Variations

- Mobilization of the splenic flexure is optional.
- Primary anastomosis with or without diverting loop ileostomy is an alternative in some situations.

Complications

- Ureteral injury
- Splenic injury

Template Operative Dictation

Preoperative Diagnosis *Complicated diverticular disease/rectosigmoid carcinoma/other*

Procedure Left colon resection with end colostomy (Hartmann's procedure)

Postoperative Diagnosis Same.

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Indications This is a ___-year-old *male/female* who presents with *abdominal pain/fever/obstructive symptoms/recurrent bouts of diverticulitis* and was found to have *an acute perforation of the sigmoid colon/other. Elective/emergent* resection was indicated.

Description of Procedure The patient was placed in the supine position and general endotracheal anesthesia was induced. Time-outs were performed using both preinduction and preincision safety checklists to verify correct patient, procedure, site, and additional critical information prior to beginning the procedure. Preoperative antibiotics and subcutaneous heparin were given. A urinary catheter and orogastric tube were placed. The abdomen was prepped and draped in the usual sterile fashion. A vertical midline incision was made from *above the umbilicus to the pubis*. This was deepened through the subcutaneous tissues to the level of the fascia. The linea alba was identified and incised, and the peritoneal cavity entered. The abdomen was explored. *Adhesions were lysed sharply under direct vision with Metzenbaum scissors/under direct vision with electrocautery. A sigmoid colon perforation with purulence in the left lower quadrant/a mass in the sigmoid colon/other* was found.

The small bowel was inspected and retracted toward the right upper quadrant using a moist towel and the (*Bookwalter/Thompson/Omni/Kirschner*) retractor system. The sigmoid colon and descending colon were then mobilized by incising along the white line of Toldt proximally from the pelvic inlet toward the splenic flexure. The left ureter was identified and protected.

Points of transection were selected proximally (*usually the descending colon or proximal sigmoid colon*) and distally (*usually proximal rectum*) to the affected bowel. Proximally, a mesenteric defect was created, and the colon was divided with a linear cutting stapler. The distal point of transection was divided in a similar fashion using a *linear/curved cutting* stapler. The peritoneum overlying the mesentery was then scored with electrocautery, and the *inferior mesenteric artery/sigmoid vessels was/were* identified, double ligated with 2-0 Vicryl sutures, and transected. The remaining intervening mesentery between the colonic transection points was divided and ligated. The specimen was removed and sent to pathology. The abdominal cavity was then copiously irrigated.

The proximal colon reached easily to the proposed colostomy site without tension. A ___-cm circular disk of skin was excised from the colostomy site in the *left lower quadrant/other location*. The incision was deepened through all of layers of the abdominal wall. The anterior rectus sheath was incised vertically, and the muscle was bluntly split. The posterior rectus sheath and peritoneum were incised vertically and the resultant defect was dilated to admit *two/three* fingers. A Babcock clamp was advanced through the colostomy skin incision into the abdominal cavity and used to grasp the stapled proximal bowel. The colon was passed out through the ostomy site without torsion or tension.

The fascia was closed with *a running/ interrupted suture of* ____. The skin was closed with *skin staples/subcuticular sutures of ___/other*. The staple line was removed from the proximal colon, and the colostomy was then matured using multiple 3-0 Vicryl sutures in an interrupted fashion. Dressings were applied and an ostomy bag was applied over the colostomy.

The patient was awoken and extubated. *She/he* tolerated the procedure well and was taken to the postanesthesia care unit in stable condition. All counts were correct at the completion of the procedure.

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