

Indications

Loop ileostomy is performed when temporary diversion of the fecal stream is required. It may be used to protect a tenuous colon anastomosis or as part of the initial treatment of severe inflammatory bowel disease.

In some patients loop ileostomy is easier to construct than end ileostomy. It allows better preservation of the blood supply to the stoma.

Pitfalls and Danger Points

If the ileum is not transected at the proper point to make the proximal stoma the dominant one, total fecal diversion is not accomplished.

See Chap. 59.

Operative Strategy

Properly performed, this technique is a good method for achieving temporary but complete diversion of the intestinal contents. Because the entire mesentery is preserved, the blood supply to the stoma is optimized. Closure can be accomplished by a local plastic procedure or by local resection and anastomosis.

C.E.H. Scott-Conner, MD, PhD (✉)
 Department of Surgery,
 Roy J. and Lucille A. Carver College of Medicine,
 University of Iowa, 200 Hawkins Drive, 4622 JCP,
 Iowa City, IA 52242, USA
 e-mail: carol-scott-conner@uiowa.edu

J.L. Chassin, MD
 Department of Surgery,
 New York University School of Medicine,
 New York, NY, USA

Documentation Basics

Findings and indications

Operative Technique

If a loop ileostomy is being performed as a primary procedure, a midline incision beginning at the umbilicus and proceeding caudally for 8–10 cm is adequate. Identify the distal ileum and the segment selected for ileostomy by applying a single marking suture to that segment of the ileum that will form the *proximal* limb of the loop ileostomy. This procedure can also be performed laparoscopically (see Chap. 64 and references at end).

Select the proper site in the right lower quadrant (see Chap. 59) and excise a nickel-size circle of skin. Expose the anterior rectus fascia and make a 2 cm longitudinal incision in it (see Fig. 59.1). Separate the rectus fibers with a large hemostat and make a similar vertical incision in the peritoneum (see Figs. 59.2 and 59.3). Then stretch the ileostomy orifice by inserting two fingers (see Fig. 59.4).

After this step has been accomplished, insert a Babcock clamp through the aperture into the abdominal cavity. Arrange the ileum so the proximal segment emerges on the cephalad side of the ileostomy. Then grasp the ileum with the Babcock clamp and deliver it through the abdominal wall with the aid of digital manipulation from inside the abdomen. The proximal limb should be on the cephalad surface of the ileostomy.

Confirm that there is no tension whatever on any distal anastomosis (Fig. 60.1). Position the ileum so the afferent or proximal limb of ileum enters the stoma from its cephalad aspect and the distal ileum leaves the stoma at its inferior aspect. To ensure that the proximal stoma dominates the distal stoma and completely diverts the fecal stream, transect the anterior half of the ileum at a point 2 cm distal to the apex of the loop (Fig. 60.2). Then evert the ileostomy (Fig. 60.3). Insert interrupted atraumatic sutures of 4-0 PG

[†]Deceased



Fig. 60.1

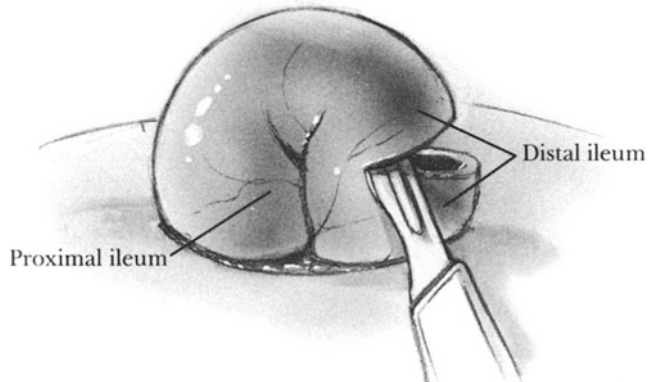


Fig. 60.2

to approximate the full thickness of the ileum to the subcuticular portion of the skin. The end result should be a dominant proximal stoma that compresses the distal stoma (Fig. 60.4). We do not suture the ileum to the peritoneum or fascia.

To minimize contamination of the abdominal cavity, it is possible to deliver the loop of ileum through the abdominal wall and then pass a small catheter around the ileum and through the mesentery to maintain the position of the ileum. Division of the ileum and suturing of the ileostomy may be postponed until the abdominal incision has been completely closed. After suturing the ileum to the subcutis, remove the catheter.

Close the abdominal wall with interrupted No. 1 PDS sutures by the modified Smead-Jones technique described in Chap. 3. Close the skin with interrupted fine nylon or skin staples. Then mature the loop ileostomy as described above if this step has not already been done.

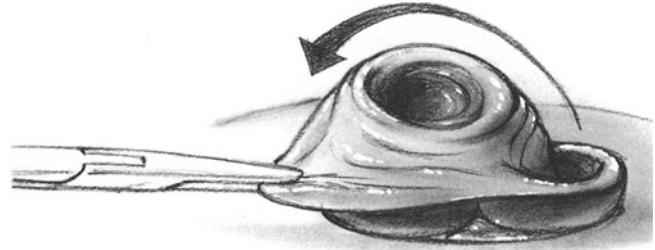


Fig. 60.3

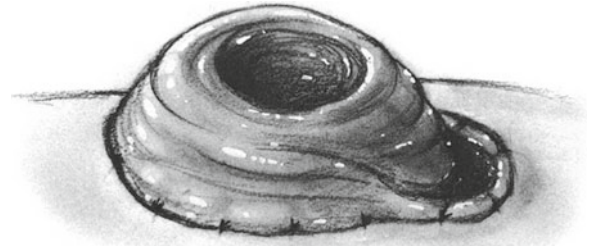


Fig. 60.4

Postoperative Care

See Chap. 59.

Complications

See Chap. 59.

Further Reading

- Beagley MJ, Poole G, Peat BG, Rees MJ. The use of temporary laparoscopic loop ileostomy in lumbosacral burns. *Burns*. 2000;26:298.
- Flati G, Talarico C, Carboni M. An improved technique for temporary diverting ileostomy. *Surg Today*. 2000;30:104.
- Fonkalsrud EW, Thakur A, Roof L. Comparison of loop versus end ileostomy for fecal diversion after restorative proctocolectomy for ulcerative colitis. *J Am Coll Surg*. 2000;190:418.
- Hasegawa H, Radley S, Morton DG, Keighley MR. Stapled versus sutured closure of loop ileostomy: a randomized controlled trial. *Ann Surg*. 2000;231:202.
- Orkin BA, Cataldo PA. Chapter 44: Intestinal stomas. In: Wolf BG, Fleshman JW, Beck DE, Pemberton JH, Wexner SD, editors. *The ASCRS textbook of colon and rectal surgery*. New York: Springer; 2007. p. 622–42.