

Overview of Ostomy Types (Enteral)

- **Colostomy**
 - Most common type of enteral stoma
 - Right colon is usually avoided (large diameter, prone to leakage)
 - Appliances changed ~q6-7 days
- **Ileostomy**
 - Easier to construct and reverse
 - Associated with more dehydration and skin excoriation
 - Ostomy is emptied 3-4x/daily, wafer is changed ~q4 days

Types of Ostomy Configurations

- **Loop Ostomy**
 - Two openings created at anterior wall of intestine within same skin aperture
- **End Ostomy**
 - Intestine is divided; proximal end → stoma
 - Distal end is left within the abdomen (**Hartmann pouch**) OR
 - Distal end is brought to the skin (**mucus fistula**)
- **Continent Ileostomy (Kock Pouch)**
 - Internal pouch made of pleated intestine to create a nipple valve
 - Prevents passage of stool until intubated with a catheter

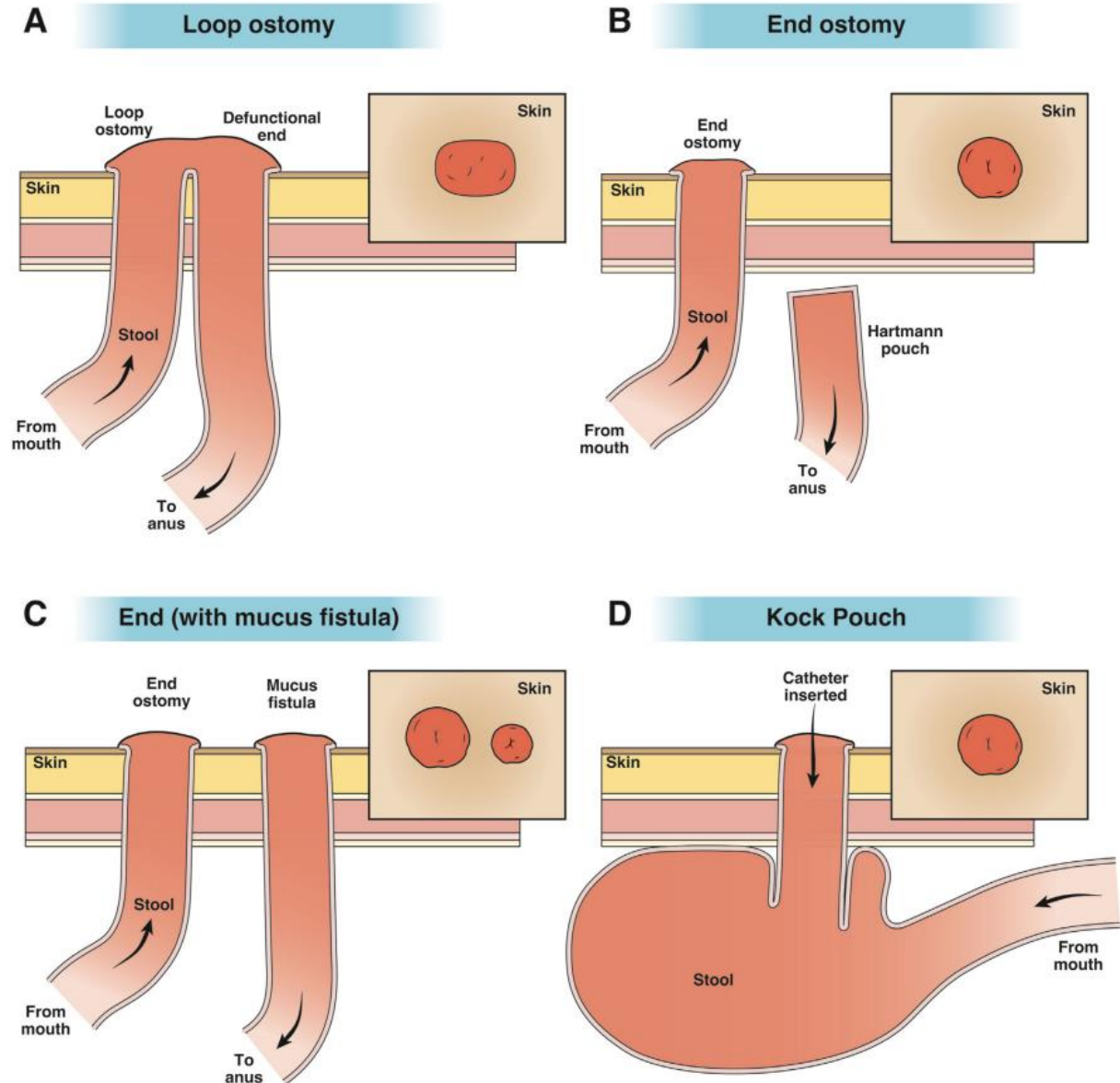


Figure 1. Schematic of different types of ostomy configurations including the (A) loop ostomy, (B) end ostomy with Hartmann's pouch, (C) end ostomy with mucus fistula, and (D) the continent ileostomy (Kock pouch).

Ostomy Complications and Management

Table 1. Treatment Strategies for High Ostomy Output

Type of treatment	Examples
Bulking agents	Psyllium fiber Guar gum Marshmallows ⁹
Antimotility agents	Loperamide Diphenoxylate and atropine Codeine Tincture of opium
Antisecretory agents	Proton pump inhibitors/ H2 agonists Somatostatin analogues (ie, octreotide)
Anti-inflammatory agents (if resulting from recurrent Crohn's disease)	Consultation with IBD specialist
Adaptation-promoting agents	GLP-2 analogues (teduglutide, elsiglutide, glepaglutide, apraglutide)
Surgical	Reversal of the ostomy with restoration of intestinal continuity when possible

GLP-2, glucagon-like peptide 2; IBD, inflammatory bowel disease.

Abbreviations: Dx, diagnosis; Ddx, differential diagnosis; Tx, treatment; infx, infection; IVFs, intravenous fluids.

Hedrick TL, Sherman A, Cohen-Mekelburg S, Gaidos JKJ. AGA Clinical Practice Update on Management of Ostomies: Commentary. Clin Gastroenterol Hepatol. 2023;21(10):2473-2477. doi:10.1016/j.cgh.2023.04.035

Short-Term Complications

- **Early high ostomy output**
 - Occurs within 3 weeks of stoma creation
 - Output > fluid intake (~ >1.5 L/d)
 - Seen in ileostomy more than colostomy
 - Ddx: infx (*C. diff*, surgical), ileus, medications
 - Tx: IVFs, stoma reversal, meds (Table 1)
- **Ostomy leakage**
 - Risk factors: obesity, placement in skin crease, loop configuration, liquid effluent
 - Best strategy → prevention i.e., surgical technique
 - Tx: antidiarrheals, pouching techniques (e.g., convex appliance, ostomy belt, paste, or barrier rings)
- **Stomal retraction**
 - Risk factors: stomal ischemia, obesity
 - Dx: Endoscopy or imaging to assess depth
 - Tx: Symptomatic (temporary stoma) vs surgical revision (permanent stoma)
- **Mucocutaneous separation**
 - Occurs if sutures detach prior to stoma maturation → open wound
 - Risk factors: immunosuppressive meds
 - Tx: pouching solutions → allow healing by secondary intention

Long-Term Complications

- **Chronic high ostomy output**
 - Occurs/persists > 3 weeks from stoma creation
 - Seen in jejunostomy, short gut (<200 cm)
 - Ddx: infx, structural, Crohn's, chronic diarrhea
 - Tx: Meds (Table 1)
- **Dermatologic problems**
 - Mainly due to leakage
 - Allergies → skin sealant, topical steroids
 - Fungal infx → antifungals, wound care
 - Pyoderma gangrenosum → multidisciplinary tx
 - Bleeding → eval for peristomal varices
- **Parastomal hernia**
 - Up to 50% of patients within 5 years
 - Risk factors: obesity, smoking, steroid use, transverse colostomies
 - Incarcerated hernia → surgical emergency
 - Tx: conservative (belt) vs surgical revision
- **Stomal prolapse**
 - Elongation of the intestinal portion of the stoma
 - Occurs in 5-10% of patients
 - Tx: Manual reduction (can apply sugar to reduce swelling) vs surgical revision (especially if ischemic)