

Colostomy Creation in Anorectal Malformation

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- An oblique incision is made in the left lower quadrant of the abdomen. The upper portion of the incision will accommodate the proximal stoma, and the distal end will accommodate the mucous fistula. The distance between both stomas should allow the placement of a stoma bag only covering the proximal stoma (Fig. 1).
- The sigmoid colon is identified and brought outside the incision.
- The future colostomy site is selected close to the fixed portion of the descending colon, where it attaches to the left retroperitoneum.
- A purse-string suture is placed in the colon, in the selected location of the future colostomy, and a 12-Fr Foley catheter is inserted to allow warm irrigation of the distal bowel until it is completely clean of meconium (Fig. 2).

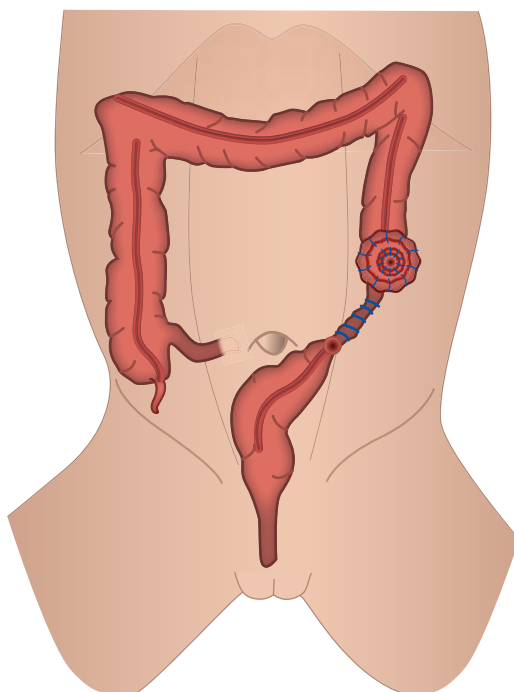


Fig. 1 The optimal position of the proximal stoma and mucous fistula

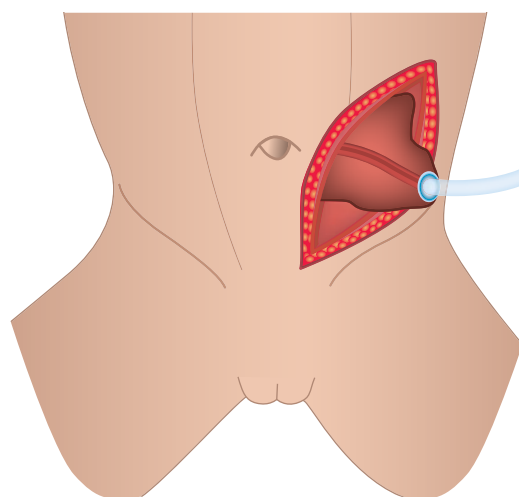


Fig. 2 Irrigation of the distal colon

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- Intestinal clamps are placed in the same location of the purse string suture, and the colon is then transected in between them.
- A tapering of the distal segment (mucous fistula) is performed with two layers of 5-0 Vicryl sutures on the antimesenteric side to create a 5-mm opening (Fig. 3).

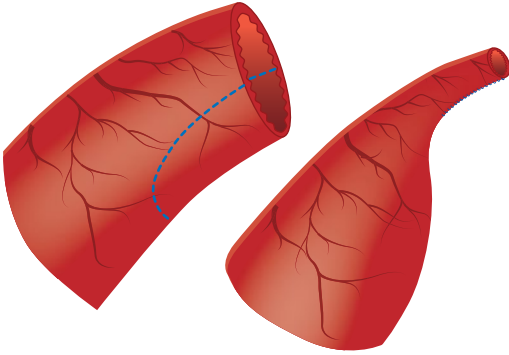


Fig. 3 Tapering of the mucous fistula

- The mucous fistula is created in the most inferomedial portion of the incision by taking sero-muscular 'bites' to the posterior fascia, allowing a 3- to 4-mm redundancy of mucosa at the skin level, without maturing the stoma.
- The anterior fascia is closed with interrupted Vicryl sutures.
- The proximal stoma is then placed in the superior portion of the incision. One centimetre of bowel must protrude, everted above the skin level (matured stoma).
- The bowel determined to be the proximal stoma must be sutured to the peritoneum and fascia, being sure its lumen is not constricted, or its blood supply compromised.
- The abdominal wall located between both stomas must be sutured in two layers with interrupted absorbable sutures.
- The subcutaneous tissue is closed with interrupted Vicryl sutures, followed by the skin with a subcuticular suture.
- The proximal stoma must be matured.

Tips

- ▶ The location of the proximal stoma should be in the middle of a triangle formed by the last rib, the umbilicus and the iliac crest in order to leave enough space to adapt a stoma bag.
- ▶ In patients with cloaca and hydrocolpos, during colostomy creation the hydrocolpos should be drained with a pigtail catheter which should

remain in place until the final repair. If there are two hemivaginas, a window should be created in the vaginal septum allowing one tube to drain both hemivaginas. If the hydrocolpos reaches above the umbilicus, it can be sutured to the skin as a tubeless vaginostomy.

Common Pitfalls

- ▶ Leaving meconium in the distal bowel leads to impaction and can contaminate the urinary tract.
- ▶ Take care not to invert the position of the proximal and distal stomas.
- ▶ Creation of a colostomy too distally results in a very short piece of bowel distal to the mucous fistula, that will subsequently interfere with the pull-through.
- ▶ Placing the proximal stoma in a mobile portion of the colon will lead to prolapse.
- ▶ Making a large mucous fistula may result in prolapse, since the stoma is created in a mobile portion of colon.

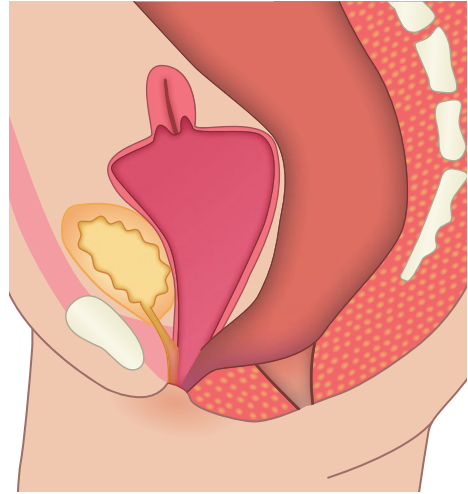


Fig. 4 Hydrocolpos in patients with cloacae should also be drained