COLONIC LAVAGE WITH LOOP ILEOSTOMY AS AN EFFICIENT OPTION TO TREAT C. DIFF FULMINANT COLITIS: CAN WE AVOID A TOTAL ABDOMINAL COLECTOMY?

Western Reserve Health Education
A Steward Teaching Affiliate

Matthew, Passeggiata, MD[1] | Geovanna Badaro[2] | Ruben H Neris, MD[1] | Pablo Giuseppucci, MD [3]

Trumbull Regional Medical Center
A STEWARD FAMILY HOSPITAL

BACKGROUND

Clostridium difficile infection (CDI) is commonly seen in hospital patients previously treated with antibiotics, producing colitis with diffuse, watery diarrhea and abdominal pain. CDI colitis is often treated medically with oral antibiotics. CDI can progress to fulminant disease, where the medical management is usually insufficient. The current treatment recommendation is abdominal colectomy with end ileostomy. In recent years, studies have been reported about colonic lavage with loop ileostomy for the treatment of fulminant colitis with positive outcomes.

AIMS

- To summarize current management guidelines of C. Diff Fulminant colitis and provide clinicians with an alternative procedure to the recommended total abdominal colectomy.
- To support previous studies in which colonic lavage with loop ileostomy has been reported to be a promising treatment of fulminant colitis due to C. Diff, especially in young, active patients.

METHODS

A laparoscopic colonic lavage with Golytely, loop ileostomy and cecostomy tube placement (20French) was performed. There were no signs of large bowel ischemia/necrosis intraoperatively. In the postoperative period, the patient was treated with vancomycin infusion via the cecostomy tube, vancomycin enemas, and metronidazole intravenously. Serial abdominal examinations were conducted every 4 hours postoperatively.

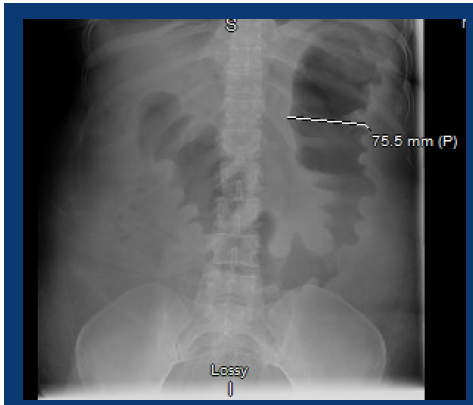


Figure 1. Abdominal X-ray upon initial presentation showing colonic distention measuring roughly 7.5 centimeters.

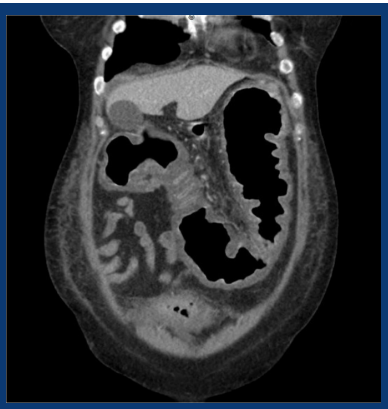


Figure 2. Abdomen/Pelvis CT showing diffuse wall thickening with adjacent fat stranding throughout the colon and colonic distension, compatible with infectious colitis.

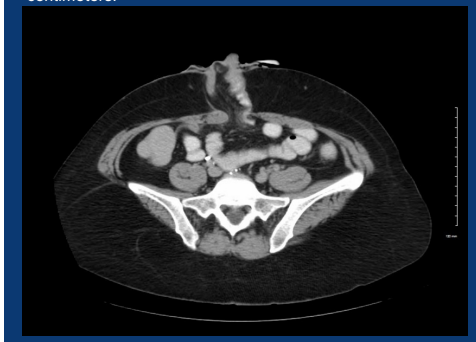


Figure 3. Abdomen/Pelvis CT 6 months status-post colonic lavage and loop ileostomy demonstrating intact ileostomy with no distension or obstruction noted.



Figure 4. Abdomen/Pelvis CT 6 months after loop ileostomy and prior to ileostomy reversal showing normal caliber of the large and small bowel with no evidence of inflammation or bowel obstruction.

RESULTS

At post-operative (POD) 1, the abdomen was soft, non-distended and appropriately tender to palpation. The patient was tolerating a soft diet and had full return of bowel function at POD2. The white blood cell (WBC) count decreased from 18.1 at POD1 to 12.4 at POD8. The patient was discharged home on POD8 with all the antibiotics discontinued. At the first post-op visit the leukocytosis was resolved and the abdominal examination was benign. The patient is currently having no limitations in her daily activities. The loop ileostomy was successfully reversed 6 months after the index procedure.

CONCLUSION

We described the case of a colonic lavage with loop ileostomy as a treatment for fulminant Clostridium difficile infection. The benefits of this procedure include minimal invasiveness, lower mortality/morbidity rate, shorter hospital stays, decreased operative pain and most importantly, the avoidance of a total abdominal colectomy. We demonstrated that the outcomes following the colonic lavage are promising and effective. We believe that this procedure should be at least considered in fulminant colitis cases, especially in young, healthy, active patients, patients with low comorbidities and patients with no signs of bowel ischemia/necrosis.

AFFILIATIONS

[1]Western Reserve Health Education/NEOMED General Surgery Residency Program, Warren OH, 44483, USA
[2]American University of Antigua Medical School, St. Johns Antigua
[3]Steward Health Trumbull Regional Medical Center, Warren OH, 44483, USA