

Management of a Retracted Colostomy With Esophageal Stent

ACG × 2022

Anasua Deb, MD PhD, Busara Songtanin, MD, Zeyad Elharabi, MD, Dushyant Pawar, MD, Marawan Elmassry, MD, Malak Faragallah, MD, Kanak Das, MD

Department of Internal Medicine, Texas Tech University Health Sciences Center, Lubbock, Texas, USA.

Introduction

Stoma retraction resulting from inadequate mobilization of the colon is seen in 1-6% patients undergoing colostomy. It is usually managed by surgical revision. We discuss successful management of such a case unamenable to surgical revision by an esophageal stent placement.

Case Description

A 36-year-old obese man with paraplegia from gunshot wound, stage 4 sacral decubitus ulcer, and urostomy tube placement presented to emergency department with fever, vomiting, diarrhea and infection of his sacral wound. He was diagnosed with osteomyelitis of the right ischium and inferior pubic ramus. To avoid fecal contamination of sacral wound, surgery created a diverting sigmoid loop colostomy which five days later retracted deep to the level of fascia along with gross fecal leakage through a fistulous track at the laparotomy site (Figure 1A). A revision of the retracted colostomy was unsuccessful due to dense intra-abdominal adhesions.

Colonoscopy through the stoma showed a moderately stenosed retracted colostomy with gross fecal leakage through mid-line wound. A 23 mm x 155 mm fully covered esophageal stent was then placed within the afferent loop (descending colon) of the colostomy to divert the fecal matter to colostomy bag. (Figure 1B, 1C, 1D). The outer end of the stent was sutured to abdominal wall skin. Following this, fecal leakage stopped completely through the mid-line wound (Figure 1E), and he was discharged home. Over the next three weeks, his course was complicated by an episode of external migration of the stent addressed with similar stent replacement followed by fixation of the inner end of stent to the colon wall using lassoes and resolution endo-clips, and the outer end to the abdominal wall skin with surgical sutures. He continues to do well as of today on a regular yet stent favorable diet along with a bowel regimen with Miralax producing a good stool output through colostomy, and to date, there was no fecal leakage through the mid-line wound (Figure 1F).

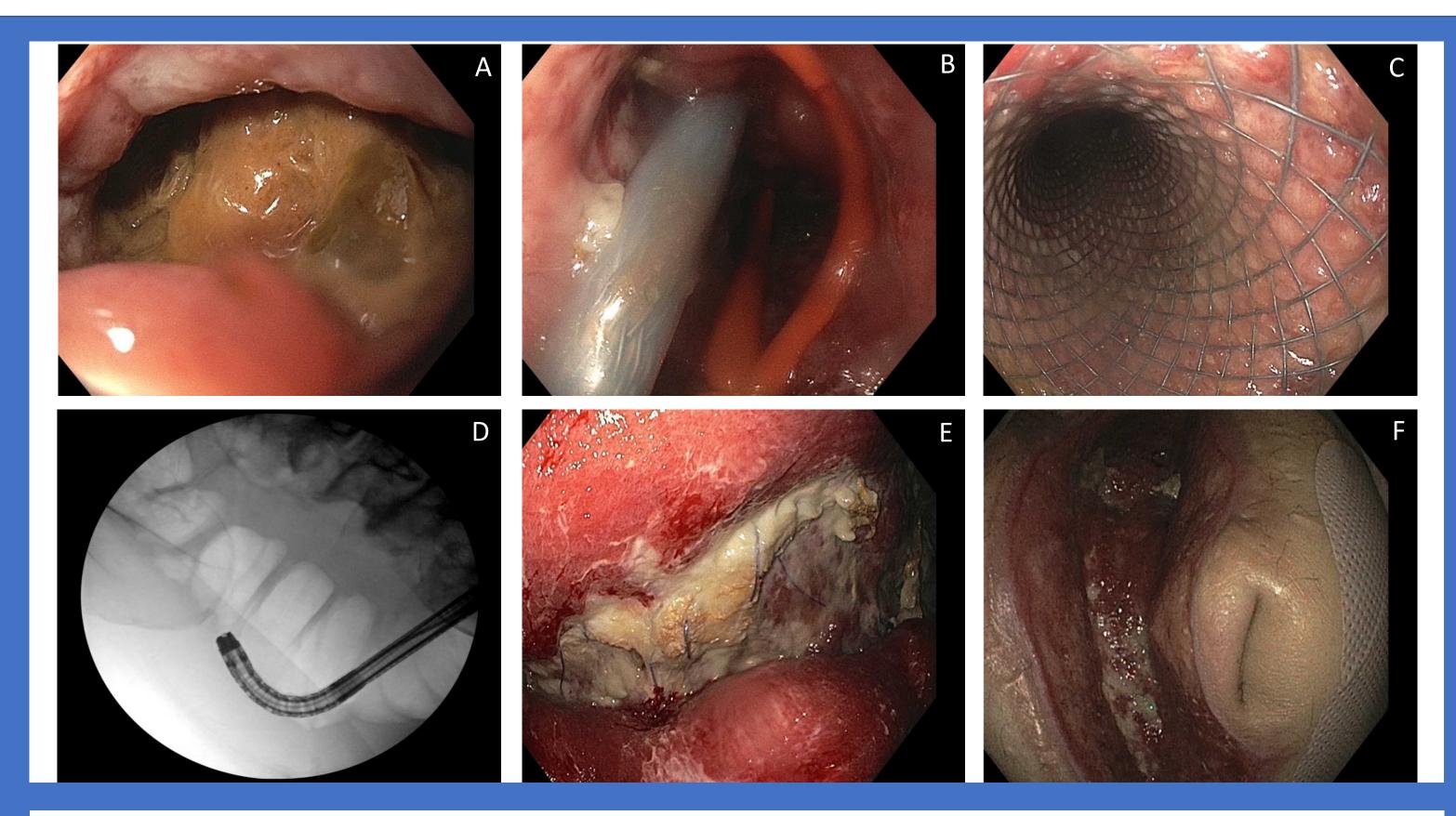


Figure 1: A: Fecal contamination of mid line wound through retracted colostomy, B: Esophageal stent placement in the afferent loop of the colostomy in progress, red rubber catheter at the site of retracted stoma placed by surgery during colostomy revision attempt, C: Stoma site following fully covered esophageal stent placement, D: Fluoroscopy image confirming esophageal stent placement, E: Midline wound free of fecal contamination 5 days after stent placement, F: Midline wound in 3 weeks after the stent placement

Discussion

Stoma retraction is a common early post-colostomy complication, that may take months to heal with conservative management with frequent wound care. Surgical management options include creating an upstream stoma or revision of the existing one. Since our patient was not amenable to surgery, and was having persistent fecal leak, an esophageal stent was placed for management of the retracted stoma. Review of existing literature showed only one case with the use of esophageal stent in similar clinical scenario, which also had successful clinical outcome.