



Unique approach to management of colo-vaginal fistula closure using Esophageal stent, Guidewire and Padlock clip



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INTRODUCTION

- Causes of gastrointestinal fistulas include malignancy, radiation therapy, inflammatory conditions like Crohn’s disease, obstetric complications, and endoscopic intervention
- Risk of colonic perforation from colonoscopy is 0.03-0.8%
- The risk of a fistula occurring after colonic anastomosis ranges up to 10%
- Clinical Presentation of colo-vaginal fistula: passage of gas or stool through vaginal canal, foul-smelling vaginal discharge, pain with bowel movement
- Current management of colo-vaginal fistulas: fully covered self-expanding metal stents, endoscopic clipping with suturing, endoscopic vacuum therapy

HISTORY

61-year-old female patient, with past medical history of hypertension, hyperlipidemia, gout, end-stage renal disease on peritoneal dialysis and awaiting kidney transplant underwent a screening colonoscopy and was found to have an iatrogenic perforation of the rectosigmoid area at 20cm from anal verge from presumed perforated diverticulum.

DISCUSSION

Colo-vaginal fistulas are a rare and unfortunate complication of colonic perforations. This case demonstrates a unique endoscopic approach for the management of colo-vaginal fistulas. This technique can be considered for patients with colo-vaginal fistulas for whom surgical management is not possible or preferred and when other traditional techniques are unsuccessful.



Initial management consisted of an Exploratory Laparotomy with sigmoid colectomy and primary anastomosis

Four months later, the patient presented with passing stool through her vagina, clinically consistent with a colo-vaginal fistula. She was subsequently admitted.

Patient underwent a colonoscopy, where an esophagogastroduodenoscopy scope was advanced about 12-15cm to where the anastomosis site was located; however, it was difficult to identify the site of the fistula. A 50-50% mixture of cyanoacrylate and lipid oral solution were injected submucosally. Then, a 23mmx12cm fully covered esophageal stent was deployed with subsequent single stentfix OTSC clip from OVESCO was applied.

Few days after the procedure the patient developed left lower quadrant abdomen pain and distention. Pt was diagnosed with pneumoperitoneum without significant peritonitis. Pt was managed conservatively with antibiotics and bowel rest.

A month later the patient underwent flexible sigmoidoscopy with removal of stentfix clip and removal of the stent. There was a large ulceration from the dilation from the stent at the anastomosis site. Due to the size of the ulcer, no intervention was performed.

The patient’s pelvic pain resolved, and she stopped passing stool through her vagina, but she continued to pass air through her vagina. Subsequent Barium X-ray was performed and revealed a persistent colo-vaginal fistula.

Flexible sigmoidoscopy was attempted three weeks later to help close the colo-vaginal fistula. The scope was advanced into the vagina and with the help of a catheter, a 021G guidewire was passed from the vagina through the fistula into colonic anastomosis. A Padlock clip was attached to the tip of the endoscope and inserted into the rectum. The fistula was centered with the help of the guidewire into the Padlock clip and the clip was released successfully. The guidewire was then pulled out from the vagina. The patient remained symptom free at one month follow up.