

Laparoscopic treatment of a diverticular colovaginal fistula

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https://youtu.be/sM_tfDhVL5c

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INTRODUCTION

Diverticular disease is a highly prevalent condition, especially among patients over 65 years of age.¹ The majority of cases are typically straightforward, however, up to 14% of complicated diverticulitis cases can progress to fistula formation, with the most frequent type being colovesical.²⁻⁴ Colovaginal fistula, in contrast, predominantly manifests in hysterectomized patients due to the absence of uterine interposition.

DESCRIPTION

A 73-year-old female patient with a surgical history of laparoscopic hepatic cystoadventicectomy and hysterectomy presented with a one-year history of dysuria and bladder tenesmus, as well as vaginal passage of gas and feces. Physical examination revealed a body mass index (BMI) of 40, absence of a palpable abdominal mass, and irregularity of the vaginal vault with no apparent fistulous opening on colposcopy. Colonoscopy was unsuccessful in progressing beyond the rectosigmoid junction due to fixed angulation (biopsies without malignancy), and barium enema ruled out synchronous colonic pathology. CT scan showed a diverticular sigmoid colon in close contact with the bladder, intravaginal gas, and mild proximal dilatation. Laparoscopic exploration was scheduled without bowel preparation.

The procedure commences with adhesiolysis of the small intestine, followed by a medial-to-lateral approach that identifies the left ureter in a sector distant from the inflammatory process. After this identification, the upper hemorrhoidal pedicle is sectioned at its origin. The procedure continues with lateral mobilization of the sigmoid, which exhibits firm adhesions to the lower sector of the bladder—close to the entrance of the left ureter—and to the vaginal vault. These adhesions are meticulously released. The chronic inflammatory process had also generated adhesions of the sigmoid colon to the rectosigmoid junction and the anterior

aspect of the upper rectum. Once these adhesions are released, the appropriate sector is exposed for distal transection. Given the significant local inflammatory component, the operating time (4 hours), and the associated stenosis, it was decided to postpone the performance of the colorectal anastomosis. Instead, the specimen was extracted through an enlargement of the port of the left iliac fossa, where the stoma is placed, where it was marked preoperatively. Intravaginal and intravesical instillation of a dilution of methylene blue showed no leaks, and the procedure was completed with a pelvic drain.

The postoperative course was favorable, without complications, and the drain and urinary catheter were removed on the 7th postoperative day. The anatomopathological study of the specimen revealed diverticular disease, without malignancy.

CONCLUSIONS

The treatment of colovaginal fistulas of diverticular origin is surgical. The laparoscopic approach is a viable and safe option, although it is technically challenging due to the extensive inflammatory process that is often observed.

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