J-Pouch Prolapse in the Distant Postoperative Period of a Low Anterior Resection

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ABSTRACT

Various techniques, including reconstruction with a J-shaped colonic pouch, have been developed to improve the functional outcome and quality of life of patients with low anterior resection.

We present a patient who underwent anterior resection and coloanal anastomosis with a J-pouch for a rectal tumor 5 cm from the anal verge and presented with prolapse of the pouch through the anus 7 years later. Laparoscopic ventral mesh pouch pexy was performed for repair.

Keywords: J-pouch; Prolapse

INTRODUCTION

Rectal resection for any reason can impair defecation.[1-3] To improve functional outcomes, Lazorthes et al.[4] and Parc et al.[5] introduced an alternative reconstructive technique: the creation of a J-shaped colonic pouch, designed to increase the capacity of the descending colon and act as a colonic reservoir.

Prolapse of a colonic reservoir through the anus is an extremely rare condition, with very few reports in the literature. [6,7]

The purpose of this report is to present a patient who underwent low anterior resection for rectal cancer with creation of a J-pouch, and during follow-up presented with prolapse of the J-pouch through the anal canal.

CASE

A 68-year-old male patient with a history of T3N1M0 lower rectal adenocarcinoma diagnosed in 2015 underwent neoadjuvant therapy (concurrent radiotherapy with capecitabine). Due to incomplete response, a laparoscopic total mesorectal excision and J-pouch anal anastomosis were performed. He received adjuvant capecitabine for 3 months and as of 2022 had no recurrence and satisfactory function according to the Öresland index.[8]

Seven years after surgery, the patient presented with the appearance of a lump in the anus after straining to defecate, which he was able to reintroduce with the use of digital maneuvers. On physical examination, the sphincter was hypotonic, and after a Valsalva maneuver, the reservoir prolapsed through the anus (Fig. 1).

Given these findings, surgical treatment was decided upon after colonoscopy in which other lesions were ruled out. Ventral mesh pexy of the reservoir was performed. The reservoir located deep in the lesser pelvis was mobilized and reintroduced into the cavity. Ventral fixation was performed with a polypropylene mesh (Fig. 2).

Patient recovery was uneventful, and no recurrence occurred during a 3-year follow-up. There were no functional changes after surgery.

DISCUSSION

The most frequently used colonic reservoir is the J-pouch. It is preferred for its simplicity and speed of construction, as well as its good functional results.[9,10]

Early complications are similar to those of anastomoses without a reservoir.11 As for long-term complications, prolapse through the anus is rare and only a few cases have been reported. [6,7]

However, cases of neorectal prolapse have been reported in patients without a reservoir and the factors associated with this complication are female sex, preoperative radiotherapy, and minimally invasive surgery.[12] In this case, the patient had predisposing factors such as preoperative radiotherapy, laxity typical of elderly patients, and previous laparoscopic surgery, which creates fewer adhesions and facilitates prolapse.

This condition can be diagnosed by physical examination, with additional studies reserved for diagnostic doubt. Prolapse should always be corrected surgically, either by abdominal or perineal approach.[13,14]

CONCLUSION

Prolapse of the colonic reservoir through the anus after ultra-low anterior resection is a very rare complication. In this case, a ventral mesh rectopexy was performed to correct the defect with satisfactory results. Prolapse of the colonic reservoir through the anus after ultra-low anterior resection is a very rare complication. In this case, a ventral mesh rectopexy was performed to correct the defect with satisfactory results.

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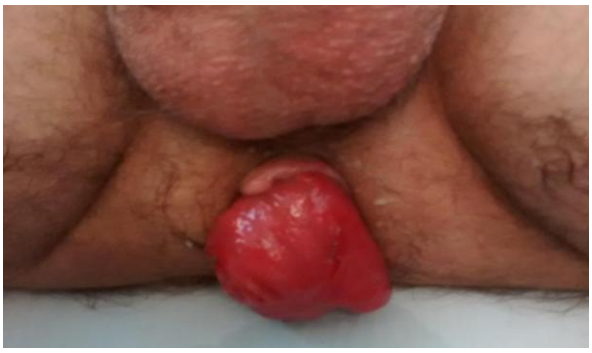

Figure 1. *Prolapse of the J-pouch reservoir after a Valsalva maneuver.*

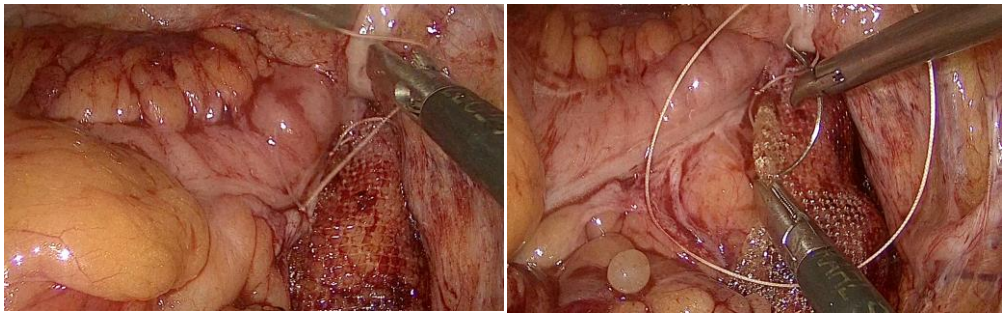

Figure 2. *Pexia of the reservoir with polypropylene mesh fixed with non-absorbable sutures.*

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