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Strangulated Rectal Prolapse in an Adult: A Case Report and Review of the Literature

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Abstract | **Case Report**

Introduction: Strangulated rectal prolapse is a rare complication of complete rectal prolapse. Its course may be marked by necrosis, or even perforation, which requires prompt management. ***Case Report:*** A 44-year-old man with chronic constipation and a several-year history of episodes of reducible rectal prolapse was admitted with a large painful anal mass that had appeared suddenly after straining during defecation. On admission, he was hemodynamically stable. Proctological examination revealed a complete, large, edematous, painful, and irreducible rectal prolapse, without necrosis. After failure of manual reduction, an emergency perineal rectosigmoidectomy with coloanal anastomosis according to the Altemeier technique was performed. The postoperative course was uneventful. The patient resumed oral feeding on the first day and was discharged on the third postoperative day. At six months, no recurrence was observed and the functional outcome was satisfactory. ***Conclusion****:* Strangulated rectal prolapse is a surgical emergency because of the risk of necrosis. In a stable patient without peritonitis, perineal rectosigmoidectomy according to Altemeier is an appropriate therapeutic option.

Keywords: Rectal prolapse; strangulation; perineal rectosigmoidectomy; Altemeier; surgical emergency.

INTRODUCTION

Complete rectal prolapse corresponds to protrusion of the rectal wall through the anus. It is an uncommon condition, observed mainly in elderly women, but it may also occur in younger individuals, particularly in the presence of chronic defecation disorders [1].

Strangulation is one of the rare complications of rectal prolapse. Strangulation exposes the patient to necrosis and, in advanced forms, to perforation. This situation therefore requires urgent management [2].

Treatment depends on the viability of the prolapsed rectum, the patient's general condition, and the possible presence of abdominal complications. If manual reduction fails, surgical intervention becomes necessary. Among the available techniques, perineal rectosigmoidectomy according to Altemeier has an important role in the management of strangulated prolapse [2–6].

We report the case of a 44-year-old man with strangulated rectal prolapse treated urgently by an Altemeier procedure. Through this case, we discuss the diagnostic and therapeutic features of this rare complication.

CASE REPORT

A 44-year-old man with chronic constipation and accustomed to evacuation enemas was admitted to the surgical emergency department for a large painful anal mass.

The history revealed recurrent episodes of rectal protrusion evolving over several years. Until then, these episodes had been painless and the patient was able to reduce the prolapse himself by manual maneuvers. The episode that prompted consultation had occurred suddenly following straining during defecation. Unlike the previous episodes, the protrusion was painful and irreducible. The patient reported no vomiting.

On admission, he was anxious but hemodynamically stable. Physical examination revealed

conjunctival pallor. The abdomen was flat, soft, depressible, and painless, with no clinical signs of peritonitis or obstruction.

Proctological examination revealed a complete, large, edematous, painful, and irreducible rectal prolapse (Figure 1). No area of macroscopic necrosis was visible.

Laboratory tests showed no notable abnormality apart from normochromic normocytic anemia, with a hemoglobin level of 9 g/dL.

Given the failure of prolapse reduction, emergency surgery was indicated. A perineal rectosigmoidectomy with coloanal anastomosis according to the Altemeier technique was performed (Figures 2 and 3).

The postoperative course was uneventful. Oral feeding was resumed on the first postoperative day, and the patient was discharged from the hospital on the third day. After six months of follow-up, no recurrence was observed. The patient also reported a satisfactory functional outcome.

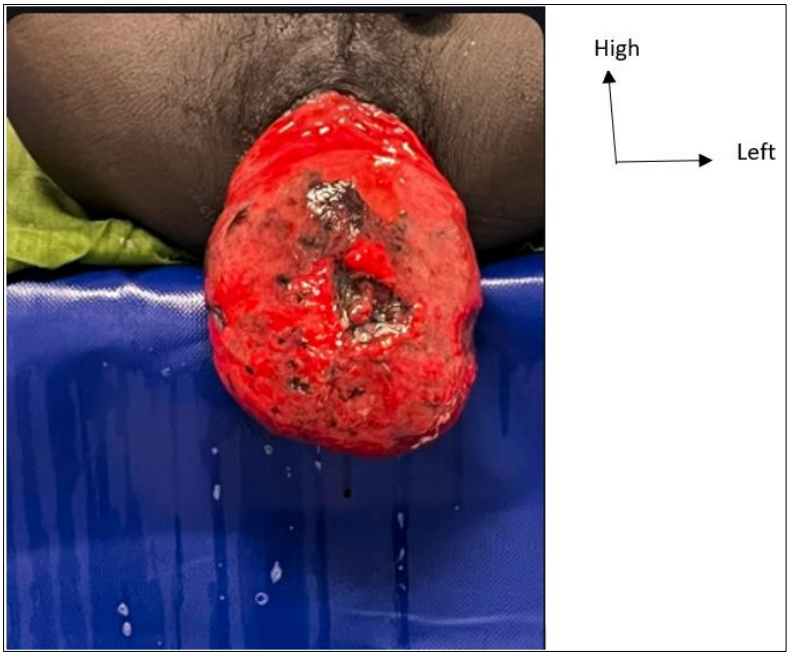

Figure 1: large, edematous rectal prolapse. Patient in lithotomy position

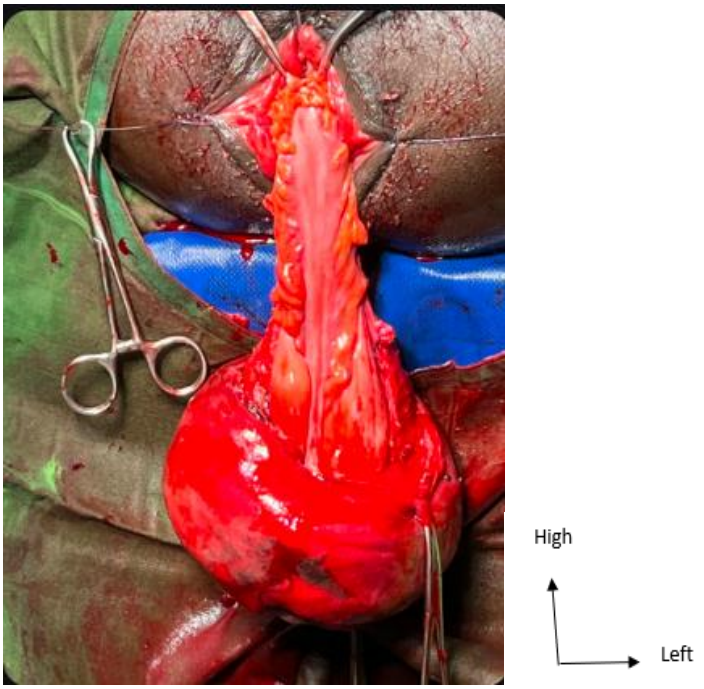

Figure 2: Intraoperative view of the Altemeier rectosigmoidectomy

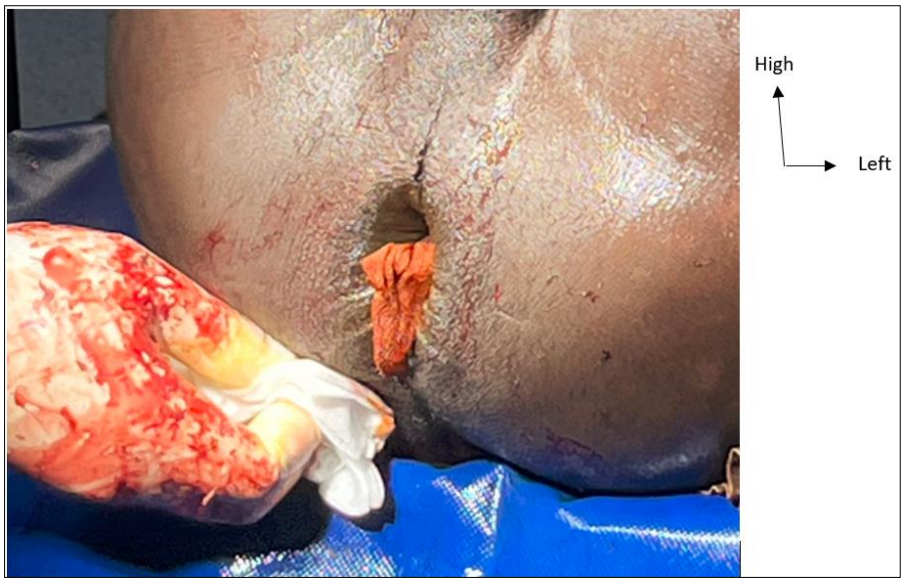

Figure 3: postoperative view following the Altemeier procedure

DISCUSSION

Complete rectal prolapse is a relatively rare condition. Its prevalence in the general population is estimated at approximately 2.5 cases per 100,000 people [1]. It preferentially affects elderly women, with a clear female predominance. Its occurrence in a 44-year-old man, as in our case, therefore appears unusual.

In younger individuals, several factors may promote the occurrence of rectal prolapse, including chronic defecation disorders, certain neurological or psychiatric conditions, as well as anatomical abnormalities of the pelvic floor [1]. Chronic constipation and repeated straining during defecation also play an important role. Repeated increases in abdominal pressure progressively contribute to impairment of the supporting structures of the rectum.

Our patient had had chronic constipation for several years, associated with episodes of rectal prolapse that he reduced manually. The acute episode occurred immediately after straining during defecation. This context suggests that straining promoted progressive exteriorization of the rectum followed by strangulation.

Diagnosis is based primarily on clinical examination. The prolapse appears as a circumferential, edematous, painful, and irreducible rectal mass [2].

Examination on admission should look for signs of severity likely to modify the therapeutic strategy: hemodynamic instability, peritonitis, obstruction, or necrosis of the prolapsed segment. In a stable patient, contrast-enhanced abdominopelvic computed tomography may be useful when an intra-abdominal complication or associated colorectal disease is suspected, provided that it does not delay surgery [2].

In our case, the patient was hemodynamically stable. The absence of abdominal pain, vomiting, and peritoneal signs suggested the absence of signs of severity. Given this stability and the absence of signs of severity, abdominal computed tomography was not performed.

In the absence of necrosis, perforation, and obstruction, a cautious attempt at manual reduction may be proposed under analgesia or sedation. The Trendelenburg position and local application of hyperosmotic substances may help reduce edema and facilitate reduction of the prolapse. However, these measures should not delay surgery in the event of failure [2].

Perineal rectosigmoidectomy according to Altemeier consists of resecting the prolapsed rectum as well as a variable portion of the sigmoid colon before performing a coloanal anastomosis. Its main advantage in an emergency setting lies in direct access to the prolapsed segment without systematic recourse to laparotomy. Several recent publications report its use in strangulated rectal prolapse [3–6].

This technique generally has limited immediate morbidity, but it is not without complications. Anastomotic leakage is one of the postoperative complications to be feared. In the long term, recurrence remains possible.

In our patient, hemodynamic stability, the absence of peritonitis, necrosis, and obstruction led to the performance of a perineal rectosigmoidectomy with immediate coloanal anastomosis according to the Altemeier technique. The postoperative course was favorable, with resumption of oral feeding on the first day and discharge on the third day.

The absence of recurrence at six months and the patient's functional satisfaction represent encouraging early results. Nevertheless, this follow-up remains insufficient to assess long-term outcomes. Prolonged follow-up is necessary to evaluate recurrence, anal continence, the course of constipation, and, more broadly, quality of life.

CONCLUSION

Strangulated rectal prolapse is a rare complication of complete rectal prolapse. Its severity is related to the risk of necrosis and perforation of the exteriorized segment. Diagnosis is essentially clinical, and management should not be delayed in the event of failed reduction.

In a hemodynamically stable patient without peritonitis, perineal rectosigmoidectomy according to Altemeier is an appropriate surgical option. In our case, this technique resulted in an uneventful postoperative course and a satisfactory functional outcome at six months. Longer follow-up nevertheless remains essential to assess the risk of recurrence and long-term functional outcomes.

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