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Strangled Rectal Prolapse in Relation to Two Observations at the University Hospital Center of Conacry

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Abstract: *Introduction:* Rectal prolapse is defined as the full or partial thickness concentric protrusion of the rectum or rectosigmoid via the anus. This is a growing clinical concern that is usually found in elderly patients. The aim of the study was to report the results of surgery in two patients operated on for strangulated rectal prolapse using the ALTEMEIER technique and to review the literature. Observation 1: 78-year-old grandmother is admitted for a painful and irreducible rectal protrusion evolving for 72 hours. Given the failure of self-medication with poultices, she consults our service. In this history, she had stubborn constipation. She was a lucid patient. We saw a voluminous perineal mass, irreducible necrotic in places, with a polyp at its top. The examination of other devices as well as the biological assessment did not present any particularity. A rectosigmoidectomy with colo-anal anastomosis was straightforward. The patient was without complications six months later. Anatomo-pathological examination of the surgical specimen was not available. Observation 2: A 51-year-old merchant, admitted for a painful, irreducible rectal protrusion evolving for 48 hours. He consults after several unsuccessful attempts at self-reduction. He had stubborn constipation and bilateral inguinal herniorrhaphy as a history. Examination showed a large perineal mass with ischemic necrosis. Elsewhere it was unremarkable. Paraclinical assessment revealed hyperleukocytosis and accelerated ESR. The diagnosis of total strangulated rectal prolapse was made. Under spinal anesthesia, a rectosigmoidectomy with colo-anal anastomosis was performed immediately. The patient seen again six months later had no complications. *Conclusion:* strangulated rectal prolapse is a surgical emergency. Its PEC takes into account the patient's condition and the surgeon's experience. Perineal resection is the preferred surgical option in emergencies although its recurrence rate is higher compared to its cure through the abdominal route.

Keywords: Strangulated Rectal Prolapse, Emergency, Perineal Resection

1. Introduction

Rectal prolapse is a disorder of the statics of the rectum, which produces an invagination of the rectal wall resulting in its exteriorization through the anus [1]. It is said to be total or complete when it consists of the entire thickness of the rectal wall, as opposed to purely mucosal or incomplete prolapse, usually encountered in children and most often of hemorrhoidal origin [2]. He is strangled when he... Rectal prolapse is more common in elderly multiparous women,

secondary to acquired lesions [3]. In young adult males, it is a rare primary lesion, intermittent, occurring during efforts on a solid perineum, often due to excess length and mobility [4].

The aim of our work was to report our experience on the management of strangulated rectal prolapse in two elderly patients treated with the ALTEMEIER technique and to review the literature.

2. Cases Presentation

Observation 1: 78-year-old BM patient admitted to the department for a progressively painful rectal protrusion, usually painless and reducible and which suddenly becomes painful and irreducible. After several poultice applications without improvement, she consults our service for support. As a history, she was a nulligest patient who presented with stubborn constipation for two (2) years. On examination she was lucid, asthenic, with sluggish abdominal skin folds. We saw a voluminous perineal mass, cylindrical with areas of necrosis, measuring approximately 4x3cm in size with at its top a polyp of 2x3 cm in size, painful and irreducible (Figure 1). The examination extended to other devices did not present any particularity. TA= TA=130/70 mmhg, pulse=80/min, Temperature=36.0°C THB=14g/l, Hte=40.6%; Urea=7.43mmol/l; created=104.6mmol/l; SG=O+; SRV=negative; AgHbs=negative. We performed a rectosigmoidectomy with colo-anal anastomosis via the perineal route using the Altemeier technique using separate stitches; the operative piece addressed to the anapath showe adenomatous polyp. The postoperative course was simple. The patient reviewed for six months (6) presented no complications.

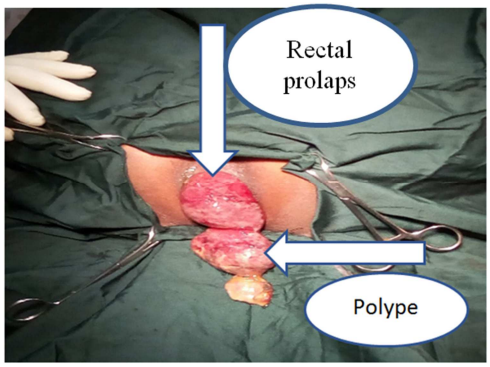

Figure 1. *Strangulated rectal prolapse + polyp.*

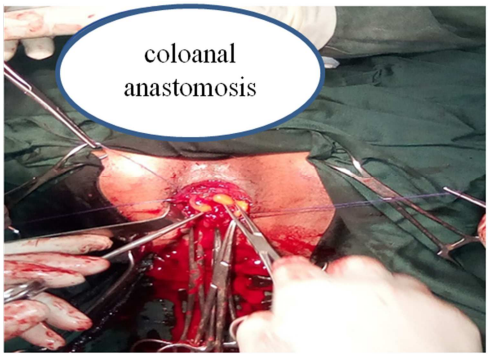

Figure 2. *Operative aspect of the anastomosis Colonanal.*

Observation 2: MB aged 51, merchant, admitted for a painful and irreducible rectal protrusion, of sudden installation during defecation. After several unsuccessful reduction attempts, he consults our service for support. Pathological antecedents included obstinate constipation, episodes of rectal protrusion and bilateral inguinal herniorrhaphy. The clinical examination showed a voluminous, cylindrical perineal mass with areas of ischemic necrosis of the anorectal mucosa (figure 3), painful and irreducible. Examination of the other appliances did not show any particular pathology. BP=120/80 mmhg, pulse=78/min, Temperature=37.2°C. The diagnosis of total strangulated rectal prolapse was made at the end of the clinical examination. The paraclinical examination revealed neutrophil polymorphonuclear leukocytosis at 14giga/l; an accelerated sedimentation rate of 105/125mm/h, a hemoglobin level of 13g/l, a hematocrit of 48%; a blood urea at 7.93mmol/l; serum creatinine at 108.5mmol/l; a GS A+ and negative RV and AgHbs serology. The patient was taken to the theater under spinal anesthesia and we performed a rectosigmoidectomy with colo-anal anastomosis through the perineal route using the Altemeier technique using separate stitches. The postoperative course was simple. The patient seen again six (6) months later had no complications.

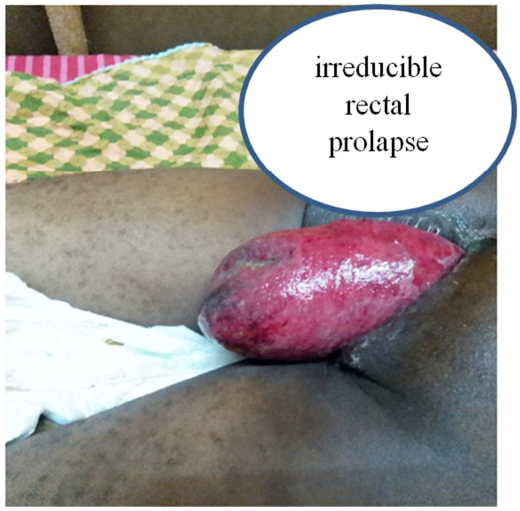

Figure 3. *Patient seen in profile during examination.*

Figure 4. *Installation of the patient on the operating table.*

3. Discussion

Rectal prolapse is a protrusion of the entire rectal wall through the anus. It is part of the rectal prolapse syndrome which also includes non-exterior internal prolapse and rectocele [5]. It is a frequent pathology in children and the elderly, particularly in women, the reason for the increased incidence in children may be due to a defect in the pelvic connective tissue and/or sphincter muscle musculature which may be the result of congenital diseases. [3, 10]. Our two cases were elderly subjects, the first was female in the seventh decade and the second male in the fifth decade. In the literature, there is no obvious cause that alone explains the occurrence of rectal prolapse [1]. The associated factors are constipation, which would favor abdominal thrust efforts on pelvic tissues in a state of senescence; obstetrical lesions which weaken the pelvic floor and the sphincter apparatus, leading to the weakening of the means of support for the rectum; a history of gynecological surgery, in particular previous hysteropexies and vaginal hysterectomies, would be responsible for an open bite of the cul-de-sac of Douglas [6, 11]. Chronic constipation was the risk factor common to our two observations in which it favored abdominal thrust efforts on pelvic tissues in a state of senescence. The anamnesis should be taken very carefully to show the complaints. The prolapsed segment can best be visualized with the patient standing and performing a Valsalva maneuver. In diagnostic work up; anal manometry, trans-anal ultrasound, defecography, anal electromyography, pudendal nerve terminal motor latency test, colonoscopy, and magnetic resonance imaging can be used for diagnosis [12, 13] The clinical picture is characterized by rectal prolapse, intermittent occurring with effort or defecation, reducing spontaneously or requiring reduction by digital maneuver. Other symptoms, sometimes associated with constipation, may reveal rectal prolapse. These are incomplete evacuation, rectal bleeding, rectal pain, incontinence, urge to have a bowel movement and tenesmus. The strangulation of the prolapse is a rare complication, which occurs in 2 to 4% of the cases and presents itself in the form of an oedematous, cyanotic, irreducible sausage, which can lead to its necrosis and therefore requiring an emergency reduction, sometimes under general anesthesia [1, 6]; The reducibility of RP decreases as the size of the hernial sac increases [14, 15]. Our two cases were received urgently in an array of prolapse strangulation with, in the first case, an oedematous, cyanotic and irreducible perineal sausage, to which was attached a large polyp; and in the second case, an edematous, irreducible sausage with areas of ischemic necrosis.

Several surgical procedures are described for the treatment of rectal prolapse via the abdominal and perineal routes. The aim of this treatment is to restore a normal anatomical position of the digestive tract and to improve the functional signs. The choice of initial treatment depends on the clinical presentation and the experience of the surgeon [7].

Outside of emergency situations, the abdominal approach seems to lead to fewer recurrences [8]. and currently, when the technical conditions are met, rectopexy with the use of prosthetic material and often by laparoscopy is an optimal approach [4]. It can be associated with sigmoid resection, which reduces the risk of postoperative constipation [9]. In an emergency situation, only rectosigmoid resection via the perineal route or the Altemeier procedure can be proposed with or without a colostomy [8]. Delorme's technique consisting of mucosectomy, which is more physiological, is better indicated outside of strangulation and prolapse necrosis [9].

Given the strangulation of the prolapse and the technical context, we opted for rectosigmoid resection using the Altemeier technique in both cases. The postoperative course was simple.

4. Conclusion

The management of rectal prolapse has always been one of the challenges of colorectal surgery. For patients with strangulated prolapse, manual reduction under sedation is used. If this fails, surgical interventions are used.

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