

# Management of Adult Rectal Prolapse in the Department of Chirurgie A of the University Hospital Center of Point G about 40 Cases

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## Abstract

**Aim:** Reporting the department's experience in managing adult rectal prolapse.

**Methods:** A descriptive study was conducted in the department of chirurgie A of the chu of point G. All patients operated on for rectal prolapse in the Department of Surgery "A" were included. Technics used were altemeier procedure and anoplasty. **Results:** 40 cases of complete rectal prolapse were identified. The sex ratio was 1.42. Average age was 50 years. During the study period, rectal prolapse accounted for 0.13% of all pathologies encountered (n = 40) and 3.37% of anorectal pathologies. Locoregional anesthesia was performed in all patients. In the series, 36 patients (90%) were operated on using the Altemeier procedure, anal cerclage was performed in 3 patients (7.5%), and anoplasty was performed in one patient (2.5%). Postoperative mortality was 2.5% (n = 1). The postoperative follow-up was simple in 95% of cases (n = 38). Anal stenosis was found in one patient (2.5%). **Conclusion:** Low-way surgery remains one of the preferred options for weakened patients exposed to anesthetic risks.

## Keywords

Rectal Prolapse, Surgery, Low-Way Surgery

## 1. Introduction

Rectal prolapse is an invagination of the rectum resulting in its externalization through the anus [1]. Rectal prolapse is relatively common and its clinical diag-

nosis is usually easy [2]. Its frequency varies through the countries. In France, Lazonthèse reported in 2002 that total rectal prolapse represented 2% of rectal prolapses [3]. In 2008, rectal prolapses accounted for 0.7% of anorectal disorders in Africa precisely in Burkina Faso [4]. The surgical treatment aims to correct the prolapse and also restore anorectal function. The purpose of this study was to report the experience of the service in the surgical management of adult rectal prolapse by the low approach.

## 2. Methods

We conducted a retrospective and descriptive study in the department of chirurgie A of the University Hospital Center of Point-G from January 2000 to December 2016. It allowed us to identify 40 cases of adult rectal prolapse. Patients over 15 years of age operated on for rectal prolapse were included and those operated on for other anorectal pathologies were excluded in this study. Clinical aspects, operative techniques, postoperative outcomes, age, and gender were studied variables. The data were analyzed using the Epi Info version 6.0 Fr software. Pearson's chi-squared was used as the comparison statistical test with a degree of significance of 5%.

## 3. Results

A total of 40 cases were identified-among which 25 were men (%) and 15 were women (%). The sex ratio was 1.45 in favor of men. The average age was  $50.10 \pm 21.44$ . Anorectal pathologies accounted for 3.60% of all surgical pathologies during the study period. Rectal prolapse represented 0.13% of all pathologies encountered and 3.40% of anorectal pathologies. The clinical and examination findings are reported respectively in **Table 1** and **Table 2**. In this series, anatomical types were represented by total prolapse in 90% of cases ( $n = 36$ ) and mucosal prolapse in 10% of cases ( $n = 4$ ). Two cases of strangulation were observed, representing 5% of cases, and an anorectoscopy was performed on 19 patients either 47.5% of cases. In our series, 36 patients, either 90% of cases, were operated on using the Altemeier procedure, anal cerclage was performed on 3 patients (7.5%), and anoplasty was performed on one patient (2.5%). 3 cases of hemorrhage were observed in intraoperative either 7.5% of cases.

**Table 1.** Clinical signs.

Signs	N	%
Anal temperature	40	100
Continence disorder	17	42.5
Rectal bleeding	3	7.5
Anal pain	3	7.5
Constipation	20	50

**Table 2.** Examination signs.

Classification of Prolapses	N	%
Class II	7	17.5
Class III	28	70
Class IV	5	12.5

Postoperative mortality rate was 2.5% (n = 1). All our patients were operated on under locoregional anesthesia. Morbidity was marked by one case of anal stenosis (2.5%). The postoperative suites were simple in 38 patients, either 95% of cases.

#### 4. Discussion

The incidence of rectal prolapse varies in the literature and through countries. It is relatively common [3], but rare in most African series [5]. El Maliki reported 20 cases over a period of 20 years in Morocco [6], while Chichom [7] found 17 cases over a period of 9 years in Cameroon, and A. Bougouma [4] reported 18 cases over a period of 10 years in Burkina Faso. A. Bogola [8] reported 114 cases over a period of 7 years in Mali. This frequency differs from that reported by many authors and could be explained by the fact that A. Bogola's study [5] also included children. The average age of our patients was 50.10 years, which is comparable to that reported in the American series [9], but higher than that reported by other authors. Female predominance was found in most studies, as opposed to our series where male predominance were noted. Rectal prolapse can occur in patients with different profiles: essentially in elderly multiparous, but also in young men and women of 20 to 30 years of age. In elderly multiparous women, rectal prolapse results from a perineum degenerative disorder with a Douglas cul-de-sac hernia through the pelvic floor diastasis. In young adults with normal pelvic floor and sphincter, rectal prolapse is a primary disease of the rectum due to excess of length and mobility. Constipation was found to be a risk factor in all series. The most obvious cause in constipated patients is the repeated highering abdominal pressure in pushing effort while defecating. Highering abdominal pressure in pushing effort is thought to be responsible for lengthening of the attachments of the pelvic viscera.

No additional examination is required in the diagnosis of rectal prolapse [10]. It is important to perform a rectoscopy especially if a low-way surgery is considered to ensure that absence of any associated lesions that cannot be relieved by this way. The treatment of rectal prolapse is surgical and there is no indefective technique for it, as rectal prolapse is a syndrome that combines anatomopathological entities with different pathogenesis.

There are several surgical treatments for rectal prolapse, including abdominal-way rectopexy almost always with prosthesis. It ensures an anatomical cure rate of over 90% whatever the technical used [1]. However, it is associated with a higher risk of induced or exacerbated constipation than Altemeier's sigmoid re-

section. Perianal surgical interventions that can be performed under locoregional anesthesia are more appropriate for high-risk elderly patients but have a lower anatomical effectiveness than abdominal surgery and are free of serious adverse effects. Delorme's mucosectomy may be more physiological than Altemeier's rectosigmoidectomy, which is indicated as a first-line treatment while any functional improvement is expected.

After Altemeier's intervention, the anatomical recovery rate varies from 42% to 100% over a follow-up period of 12 to 18 months [11] [12]. In the literature, the choice of surgical technique has been the subject of numerous discussions, particularly among the low-way techniques themselves and between low-way and high-way surgery. We and other authors believe that the low-way surgery appears to be the best for patients with high operative risk. Postoperative complications such as operative site infections, obstructions, evisceration abscesses, or incisional hernias were not observed. In France, high-way surgeries (rectopexy with prosthesis) are performed as a first-line treatment because of low recidivism rate (<5%). Furthermore, they have regained interest with the development of laparoscopy. The constipation rate in our series was about 8% after a 12 months follow-up, which is lower than that reported in the French series [11] which varies from 40% to 75%. This could be explained by the difference of surgical way and that high rectopexy is a source of constipation. The recidivism rate was nil in our series. This could be due to the small sample size or by the fact that myorrhaphy was systematically associated with the Altemeier technique in our study. The recidivism rate varies through to different series; in Cameroon and Morocco, one case was reported for 18 and 12 operated patients, respectively by Lechaux *et al.* [12].

The recidivism rate was 21% after the simple technique and 5% after the Delorme technique associated with douglassectomy and a levator myorrhaphy. The complications reported in the literature after Altemeier's intervention is somewhat different in nature but similarly higher in frequency: fistula in 1.6% to 4%, and anal stenosis in 3% of cases. In our series, any case of fistula was reported, however one patient has presented stenosis. The anatomical result was judged good in 93.10% of our patients in terms of sphincteric tonus. Authors of Altemeier WA and Ramanujan found respectively 94.95% and 97%, of achievement rate, over 12 to 24 months of follow-up. It does not exist enough data on results according to the indications. Recidivism appears to be less frequent when a more complex procedure is performed, such as a colic resection or levator myorrhaphy.

## 5. Conclusion

Low-way surgical treatment of rectal prolapse is a privileged option in fragile patients and those exposed to anesthesia risks, but may engender morbidity.

## Conflicts of Interest

The authors declare no conflict of interest regarding the publication of this paper.

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