

Surgical Management of Hemorrhoidal Disease at the Pr Bocar Sidy Sall University Hospital Center in Kati (Mali)

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Abstract

Original Research Article

Introduction: Hemorrhoidal disease encompasses all clinical manifestations related to the dilation of the capillaries in the rectal cavernous body, which move downward from the anal canal. It is considered by the public as a shameful disease. **Objective:** To study the surgical management of hemorrhoidal disease in the general surgery department of CHU Pr Bocar Sidy Sall in Kati. **Methodology:** This is a retrospective and prospective, descriptive and analytical study from January 2014 to December 2022, conducted in the general surgery department of CHU BSS in Kati. **Results:** We collected 51 cases of patients operated on for hemorrhoidal disease, representing 0.9% of consultations, 4.3% of surgical interventions, and 54.8% of proctological pathologies. The average age was 39 years, with extremes of 16 and 74 years. There was a clear male predominance, with a sex ratio of 2.33. The main clinical signs observed were anal pain (66.7%), rectal bleeding (35.3%), and itching (27%). An anorectoscopy was requested and performed in 37% of cases. The diagnoses made were hemorrhoidal thrombosis (49%), hemorrhoidal prolapse (29.4%), and external hemorrhoid (21.6%). Hemorrhoidal disease was associated with an anal fissure in 3 patients. Hemorrhoidal prolapses were classified as Goligher stage IV in 66.7% and stage III in 33.3%. Surgical management consisted of hemorrhoidectomy using the Milligan-Morgan technique in all patients, and it was associated with fissurectomy in 3 cases. The immediate postoperative outcomes were uncomplicated in all our patients. We recorded 1 case of long-term anal stenosis, representing 3.9%. No deaths were recorded. The average hospital stay was 3 days. **Conclusion:** Hemorrhoidal disease is the most common anorectal condition, with a predilection for young adults. Therapeutic management depends on the stage of progression and the occurrence of complications.

Keywords: hemorrhoidal disease, surgical treatment, Mali.

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INTRODUCTION

Hemorrhoids, from the Greek "Hémorroïden", are ectasias of the capillaries of the rectal cavernous body. They take this name from one of the clinical manifestations of the condition : "rectal bleeding" [1].

They exist physiologically in humans and become pathological with the appearance of clinical manifestations, the main ones being: anal pain, rectal bleeding, and hemorrhoidal prolapse [2]. They can be responsible for school and work absenteeism, as well as significant aesthetic discomfort. There is little or no mortality [3].

In the United States, a study on the epidemiology of hemorrhoidal disease conducted by

HYAMS and PHILPOT found a prevalence of 27% in the population [4].

The lack of correlation between anatomical abnormality and symptoms was clearly demonstrated by an Austrian study [5].

In France, 39% of patients undergoing a routine colonoscopy had hypertrophy of the hemorrhoidal plexuses, less than half showed symptoms [5]. In the Central African Republic, hemorrhoidal disease accounted for 47.36% of all anorectal pathologies [6].

The contributing factors, although numerous and varied (the most common being constipation), all result in increased abdominal pressure. In Mali, Diallo G

et al. found a hospital frequency of 10.7% of all outpatient consultations at the Point G Hospital [7].

The District Hospital of Commune IV recorded a frequency of 66.40% in 2020. Given the high frequency of this condition in the general surgery department of the BSS University Hospital Center in Kati and the fact that no study has been conducted in the department, we initiated this study with the following

OBJECTIVES

To determine the frequency of surgical treatment for hemorrhoidal disease, to describe the techniques and indications, and to determine the postoperative outcomes.

METHODOLOGY

This was a descriptive cross-sectional study with both retrospective and prospective data collection from 2014 to 2020 and the year 2022, for a total period of 8 years. Conducted in the general surgery department of the CHU Pr Bocar Sidy Sall (BSS) in Kati, this study focused on patients who underwent surgical treatment for hemorrhoidal disease. The collection of information was carried out based on medical records, surgical report registers, and hospitalization records. An analytical sheet was established, allowing the study of the following parameters: the age and sex of the patients ; clinical signs, additional examinations, the treatment administered, as well as the short-term progression of the patients. The data were entered and analyzed using SPSS version 26. Word processing and the creation of graphs were carried out using Microsoft Word Office 2016 and Excel 2016, respectively.

RESULTS

Over eight (8) years of study, the general surgery department of the CHU Pr BSS in Kati conducted 7,947 consultations, representing 993 consultations per year. Hemorrhoidal disease accounted for 0.9% of all consultations, an average of 9 cases per

year. There were 1,185 surgical interventions (an average of 148 interventions per year). The disease accounted for 4.3% of all interventions, an average of 6.3 hemorrhoidal surgeries per year, representing 54.8% of proctological pathologies. Other proctological conditions were: 11 cases of anal fistula, 5 cases of anal fissure, and 3 cases of anorectal tumor. Males predominated with a ratio of 2.3. The average age was 39.35 ± 8.41 , with extremes of 16 and 74 years. We recorded the highest number of patients from 2020 to 2021, accounting for 45.1%. Sitting at work was the most common predisposing factor, found in 60.8%. Anal pain was the main reason for consultation in 66.7% of cases. Previous medical treatment had been administered for 30 to 90 days in 43.5% of cases. Our patients reported that 92.7% were not satisfied with this previous medical treatment. Constipation was associated with hemorrhoidal disease in 58.8% of cases. The main clinical signs observed were anal pain (66.7%), rectal bleeding (35.3%), pruritus (27%), and swelling (33.3%). Pain appeared suddenly in 80.4% of cases. Hemorrhoidal thrombosis accounted for 45.1%, including 4 cases during pregnancy, representing 10.5%, followed by hemorrhoidal prolapse (39.2%). Hemorrhoidal disease was associated with an anal fissure in 3 patients. The hemorrhoidal prolapses were classified as Goligher stage IV in 66.7% and stage III in 33.3%. Figure I shows a stage IV thrombosed hemorrhoidal prolapse. Surgical management consisted of hemorrhoidectomy using the Milligan-Morgan technique in all patients, and it was associated with fissurectomy in 3 cases. Figure II shows pedicular hemorrhoidectomy according to Milligan Morgan, and Figure III shows the surgical specimen of the 3 hemorrhoidal packages. Postoperative courses included short-term complications of pain and urinary retention in 39.2% and 3.9% of cases, respectively. In the medium term, they were uneventful in 100% of cases. We recorded 1 case of anal stenosis in the long term, representing 3.9%. The average hospital stay was 3 days. We did not record any deaths. Hemorrhoidal thrombosis was confirmed by pathological examination in 49% of our patients.



Figure 1: Thrombosed hemorrhoidal prolapse CHU BSS of Kati



Figure 2: Milligan-Morgan pedicle hemorrhoidectomy, BSS University Hospital of Kati



Figure 3: Surgical specimen of the three packages CHU BSS of Kati

DISCUSSION

1- Sociodemographic Aspects:

During the study period, we collected 51 patient records of those operated on for hemorrhoidal disease out of 1,185 interventions, representing an intervention frequency for hemorrhoidal disease of 4.3%, with an average of 9 cases per year. This frequency is comparable to that reported by Cheickna K [8], but differs from that of Diarra M [9]. This difference could be explained by the recruitment method. The average age was 39.35 years. This result is comparable to those reported by other African authors such as Diarra A [10]; Cheickna K and Oumarou Y, who had an average age of 35, 33, and 45, respectively [6, 8, 10]. In our study, the sex ratio was 2.33 in favor of men. In the studies by Pigot F *et al.*, this male predominance was observed with a sex ratio of 1.10 [11]. The slight female predominance in these studies could be explained by the low consultation rate among women due to modesty.

2- Diagnostic aspect:

Anal pain was the main reason for consultation among our patients, accounting for 66.7% of cases, followed by swelling and anal itching at rates of 33.3% and 27%, respectively. This result does not differ from that reported by Pigot, where pain accounted for 62% [11]. In our study, constipation was among the contributing factors in 58.8% of cases. The same observation was made by several authors [12, 13]. The incidence of hemorrhoids varies during pregnancy. We had 4 cases of thrombosis during pregnancy, representing 10.5%. The symptoms of hemorrhoidal disease are exacerbated during pregnancy [14]. Some authors believe that socio-professional factors influence hemorrhoidal disease [11]. Standing or sitting while performing their duties would cause prolonged strain, thereby preventing adequate venous return [11]. This behavior was observed in 31 patients in our study, representing 60.8%.

In 80.4% of cases, our patients reported a sudden onset of pain described as a feeling of heaviness (51%) or burning (43.1%), which most often occurred during defecation in 48% of cases or was permanent in 47.1% of cases. Diarra M reported in his study anal pain described as burning in 81.8% of cases, occurring after bowel movements in 66.7%, and intermittently in 90.9% [9].

In our study, hemorrhoidal thrombosis accounted for 45.1%, including 4 cases during pregnancy, representing 10.5%, followed by hemorrhoidal prolapse at 39.2%. Hemorrhoidal prolapse was classified as Goligher stage IV in 66.7% and stage III in 33.3%. This result differs from those of Pigot F [11] and Diarra M, where stage I was found in 94% and 81.7%, respectively [9]. These differences could be explained by the fact that our study only included stages III and IV, which require surgical treatment. Stages that only require medical treatment were not included.

3- Therapeutic aspect:

All our patients underwent surgery under spinal anesthesia. The surgical technique performed on all our patients was the pedicled hemorrhoidectomy according to Milligan Morgan. This surgical technique was performed in 51% of cases in the study by Cheickna T [8]. The most commonly used technique in Europe was codified by Milligan, Morgan, Jones, and Officer [15].

4- Evolution aspect:

In our study, postoperative outcomes were marked in the short term by pain (39.2%) and urinary retention (3.9%). Cheickna T, for his part, reported urinary retention (2%), hemorrhage (4.1%), delayed healing (6.1%), and scar stenosis (2%) [8].

There was no mortality in our study, as in the study by Cheickna T [8]. However, two cases of death have been reported in the literature, related to cardiac arrest in a patient with hypertension and to the decompensation of chronic leukemia on the third postoperative day in 2004 by M Kouadio GK in Côte d'Ivoire [15].

CONCLUSION

Hemorrhoidal disease is the most common anorectal condition, with a predilection for young adults. The epidemiological, clinical, and therapeutic aspects of this condition are varied. Its definitive diagnosis relies on anorectoscopy. The primary concern for any anal problem in an adult or elderly person should first be ruling out rectal cancer. Most patients with hemorrhoidal disease seek consultation at a late stage.

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