

# Anal Pathologies: What Management at the Reference Health Center of Bamako's Commune V?

Sanra Déborah Sanogo<sup>1\*</sup>, Moussa Y. Dicko<sup>2</sup>, Ousmane Diarra<sup>3</sup>, Abou A. Diarra<sup>3</sup>, Drissa Katilé<sup>2</sup>, Abdoulaye Maiga<sup>1</sup>, Ouatou Mallé<sup>1</sup>, Sabine Drabo<sup>1</sup>, Makan S. Tounkara<sup>2</sup>, Hourouma Sow<sup>2</sup>, Kadiatou Doumbia<sup>2</sup>, Anselme Konaté<sup>2</sup>, Moussa T. Diarra<sup>2</sup>

<sup>1</sup>Hepato-Gastroenterology Department, CHU Point G, Bamako, Mali

<sup>2</sup>Service d'hépatogastroentérologie, CHU Gabriel Touré, Bamako, Mali

<sup>3</sup>Hepato-Gastroenterology Unit, CSREF Commune V, Bamako, Mali

Email: \*deborahsanra@yahoo.fr

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## Abstract

Anal pathologies are conditions affecting the anal margin and the anal canal. The aim of our study was to update data on anal diseases. Non-specific, it can reveal an emergency, a serious illness, a chronic disease or a benign condition. It was a prospective, descriptive and analytical study from April 2022 to March 2023, carried out in the hepato-gastroenterology unit of the Centre de Santé de Référence de la commune V du District de Bamako in Mali. Out of seven hundred and forty-nine (749) patients seen in consultation, 98 had anal pathology, *i.e.* a prevalence of 13.08%. The mean age was  $40 \pm 15.15$  years and the sex ratio was 1.5. Hemorrhoidal disease and anal fissure were the most frequent pathologies in 66.4% and 24.4% of cases respectively. Medical treatment was initiated in 91.9% of patients with hemorrhoidal disease and 91.7% with anal fissure. Anal pathologies are common in young male patients. In our context, they are dominated by benign conditions.

## Keywords

Anal Pathologies, Hemorrhoidal Disease, Anal Fissure

## 1. Introduction

Anal pathologies are conditions affecting the anal margin and the anal canal. They remain a frequent reason for consultation in both general medicine and gastroenterology [1].

Several studies have been carried out on these conditions, particularly in

women during pregnancy and post-partum. These focus on haemorrhoidal pathology, anal fissure and anal fistula [2].

In sub-Saharan Africa, the prevalence of these anal pathologies is poorly known. They are probably underestimated due to modesty, reliance on traditional medicine, negligence and lack of information [3].

In Mali, in 2006, an average annual frequency of 21.4% of haemorrhoidal pathology over a 7-year period was found in the general population [4].

A study carried out [5] on anal pathologies during pregnancy gave a frequency of 32.7%. Nowadays, a sepsis, anesthesia and more modern instrumental, medical or surgical techniques are used for treatment. Although underestimated, anal pathologies remain a cause for concern for our patients and are due to multiple etiologies in our context. We undertook this study in order to update data on anal affections, given the often fragmentary nature of previous studies.

## 2. Materials and Methods

This was a prospective, descriptive and analytical study from April 2022 to March 2023, *i.e.* a period of one year (12 months). It took place at the hepatogastroenterology unit of the Centre de Santé de Référence de la commune V du District de Bamako in Mali. The study population consisted of all patients seen in consultation in the unit during the study period. The minimum sample size was calculated using the Schwartz formula and estimated at 15.2. We included patients with anal pathology who were regularly monitored and managed in the department. The parameters studied were: age, sex, pain characteristics, diagnosis and treatment. We performed a full proctological examination on all patients. This included careful inspection of the anal margin, anorectal touch and anoscopy. Patients were examined in good light, in the genu-pectoral position, with the rectum empty. Informed consent was obtained.

Data were collected from patients, using consultation and hospitalization registers. They were completed by individual survey forms, then entered and analyzed using “SPSS” version 26 software. Word processing with “WORD” and “EXCEL” version 2019. The Chi<sup>2</sup> Test was used to compare results, which were significant at  $p < 0.05$ .

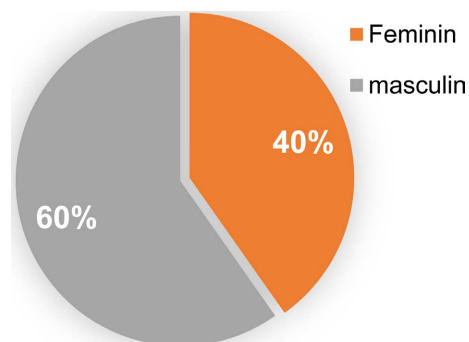
## 3. Results

Of seven hundred and forty-nine (749) patients seen in the medical department of the hepatogastroenterology unit of Bamako’s commune V referral health center, 98 had anal pathology, representing a prevalence of 13.08%. The male sex was the most represented at 60%, with a sex ratio of 1.5 (Figure 1). The most represented age group was between 36 and 60, *i.e.* 37.75%. The average age was  $40 \pm 15.15$  years, with extremes of 15 and 80 years (Figure 2).

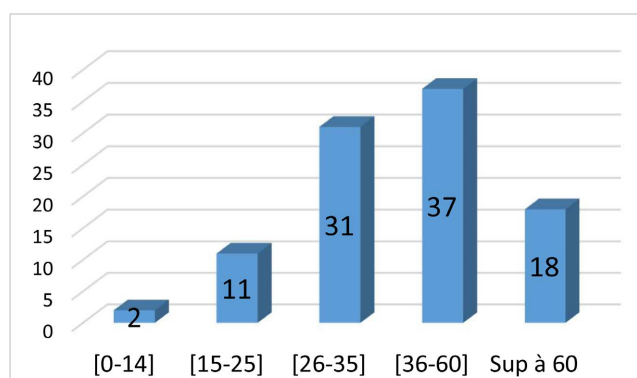
The most common reasons for consultation were anal pain, followed by anal bleeding in 66.3% and 25.5% of cases respectively. The most common risk factors were constipation and sedentary lifestyle, with 66.3% and 30.6% of our patients respectively. Haemorrhoidal disease and anal fissure were the most com-

mon pathologies, accounting for 65% and 22% of cases respectively. The majority of our patients (76.93%) received Level I analgesics. There is no significant relationship between gender and anal pathology (**Table 1**).

Hemorrhoidal disease was treated medically in 91.9% of patients, and 3.2% underwent surgery, all using the Milligan and Morgan technique. Medical treatment was initiated in 91.7% of our anal fissure patients.



**Figure 1.** Sex.



**Figure 2.** Age range (years old).

**Table 1.** Sex and anal pathology.

Anal pathologies	Sex		Total
	Female	Male	
Hemorrhoidal disease	25 (38.5)	40 (61.5)	65 (100)
Anal fissure	12 (54.5)	10 (45.5)	22 (100)
Anal abscess	3 (27.3)	8 (72.7)	11 (100)
Anal tumor	1 (100)	0	1 (100)
Condylome anal	3 (75)	1 (25)	4 (100)
Anal ulceration	1 (100)	0	1 (100)

Pearson chi-square = 9.275, ddl = 7, P = 0.233.

#### 4. Comments and Discussion

During our study, we were confronted with a number of limitations:

- Socio-cultural factors such as the modesty of some patients
- Small sample size
- Limited financial resources

Despite these limitations, the results obtained enabled us to open a discussion with the literature.

The department carried out 749 consultations, and 98 patients were included in our study. This represents a response rate of 100%. This enabled us to determine the frequency of anal pathologies, *i.e.* 13.15%, which was significantly higher than that found by Traore [6], which was 1%.

The male sex was the most represented, at 60% (n = 58), with a sex ratio of 1.51. This result is in line with those of other authors [6] [7] [8], all of whom found a higher frequency of anal pathologies in men. This male predominance could be explained by the greater financial independence of men, giving them easier access to healthcare [9]. Thus, the low predominance of women could be explained by the fact that, in our socio-cultural context (anal pathologies are considered shameful diseases), women rarely consult for proctological affection [6]. Women rarely consult us for proctological disorders.

The average age of our patients was  $40 \pm 15.15$  years, with extremes of 6 and 80 years. The 36 - 60 age group was the most represented, at 37.75% (n = 37). This rate is comparable to that of khadija HALAL [10], who obtained 62.74% in the 30 - 49 age group. Traoré T [6] had the most represented age group 26 - 40 with 41.70%.

According to the findings of numerous studies, especially in Africa [11] [12] [13] [14], this pathology affects a young population. This juvenile predominance of our patients could be explained by the youth of our population. In line with the literature, anal pain and anal pruritus were the predominant functional signs in our study, at 66.3% and 85.7% respectively. These frequencies are comparable to those reported by Katilé [15] and Dia [16], which were respectively 59%, 78.4% in favor of anal pain.

Pain was moderate in 67.82% of patients in our study, a result clearly superior to that of Camara LS [17], who found moderate-intensity anal pain in 45.1% and 53.9% of patients respectively.

The majority of our patients (76.93%) had Level I analgesics as a calming factor. This rate is comparable to that obtained by Yassibanda S *et al.* [18], who obtained 78%. Hemorrhoidal disease was treated medically in 91.9% of patients, and 3.2% underwent surgery, all using the Milligan and Morgan technique. Medical treatment was instituted in 91.7% of our patients with anal fissure.

## 5. Conclusion

This study has given an overview of the most frequent etiologies, but a larger study is needed to better define the etiologies and to understand their management in our context. Anal pathologies are common in young male patients. In our context, they are dominated by benign affections represented by hemorr-

hoidal disease followed by anal fissures. Medical management of these conditions is effective, which is why we need to combat the taboo they represent.

### Conflicts of Interest

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

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