

Epidemiology and Management of Anal Suppuration at the Donka National Hospital, Chu De Conakry, Guinea

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ABSTRACT

Introduction: Anal suppurations (fistula and abscess) correspond to two progressive phases of the same disease, characterised by an infection of cryptic origin in the anal canal. The objectives of this study were to determine the hospital frequency, to describe the clinical aspects and to determine the therapeutic modalities of anal suppurations in the department.

Methodology: This was a one-year dynamic descriptive study of patients admitted to and operated on for anal suppuration in the Department of Visceral Surgery, Donka National Hospital, Conakry University Hospital.

Results: Out of a total of 351 patients operated on, we recorded 21 cases of anal suppuration, i.e. 5.98%. Anal suppuration accounted for 45.65% of all proctological disorders. The average age was 43.09 years. There was a clear male predominance (95.23%) with a sex ratio of 20:1. The clinical picture was dominated by anal discharge and evidence of skin orifices. Retroviral serology, haemogram, HBsAg and blood glucose were performed in all patients. All patients were treated surgically.

Post-operative management was straightforward in 95.23% of cases, with complications occurring in 4.76%.

Conclusion: Anal suppuration remains by far the most frequent proctological disease in our practice. They constitute a real public health problem because they are underestimated in the African population due to socio-cultural factors. Diagnosis is essentially clinical and treatment is surgical.

Keywords:

Anal suppuration, Epidemiology, Fistula, Fistulectomy, Haemorrhoidectomy.

Introduction

Anal suppurations (fistula and abscess) correspond to two progressive phases of the same disease, characterised by an infection of cryptic origin in the anal canal. They may be seen either as abscesses with pain, swelling and general signs of varying intensity, or as fistulae with perianal discharge [1].

An abscess is a surgical emergency, whereas an anal fistula is a chronic infection that always warrants careful investigation to separate it from other suppurations of the ano-perineal region [2]. Treatment of anal fistulas is essentially surgical [3].

The objectives of this study were to determine the frequency of hospitalization, to describe the clinical aspects and to determine the therapeutic methods for anal suppurations.

Methods

This was a prospective descriptive study lasting one year from 1 January 2022 to 31 December 2022. It covered patients admitted and operated on for anal suppuration in the visceral surgery department during the study period. A survey form was drawn up for the purposes of the study. The parameters studied were epidemiological, clinical and therapeutic. The average follow-up time was at least 3 months.

Results

Out of a total of 351 patients operated on in the department during the study period, we recorded 21 cases of anal suppuration, i.e. 5.98%. These anal suppurations represented 45.65% of all proctological affections (n=46). The average age of our patients was 43.09 years, with extremes of 22 and 75 years. We observed a predominance in the age range 31-40 years with a frequency of 38.09% (n=8).

Males predominated, with a frequency of 95.23% (n=20) compared with 4.76% (n=1) of females, and a male/female sex ratio of 20. Workers were the most affected socio-professional group with 28.57%, followed by civil servants with 23.80%. Anal discharge was the main reason for consultation, occurring in 90.47% of cases, followed by anal pain in 66.66%. The average admission time for our patients was 23.5 months, with extremes of 7 days and 144 months. Physical signs were dominated by the presence of skin orifices and perianal discharge in 90.49% (n=19), haemorrhoidal marks in 14.28% and anal swelling in 9.52%. The external orifices were single in 18 patients (94.736%) and multiple in 1 patient (5.263%). On rectal examination, good sphincter tone was noted in the majority of our patients (19 cases, 90.47%), while sphincter tone was not assessed in 9.52% (2 cases). Retroviral serology, haemogram, AgHbs and glycaemia were performed in all patients (100% each); fistulography in 19.047% (4 cases), and stool parasitology in 47.619% (n=10). Locoregional anaesthesia was the most

common type of anaesthesia used in our patients, 85.71% (n=18), followed by general anaesthesia in 3 cases (14.28%). All abscesses were incised and drained, i.e. 9.52% (n=2). In cases of fistula, the surgical procedures performed were fistulectomy in 38.09%, fistulotomy in 33.33% and fistulectomy+suture in 19.047%. All our patients received medical treatment consisting of antibiotics, analgesics and local care.

The postoperative course was simple in 95.23% (n=20) and we noted one case of recurrence of anal fistula (4.76%). We did not record any cases of haemorrhage, anal incontinence or postoperative death. The average length of hospital stay for our patients was 6.14 days, with extremes of 3 days and 11 days. The length of stay of 3-7 days was the most common, at 80.952%. The length of hospitalization noted beyond 7 days was in 19.04%. Patients were monitored postoperatively for 3 months.

Discussion

Anal suppuration is one of the most frequent pathologies in proctology. They account for almost half of all proctological disorders in the literature [4 and 5], as in our study. Our results are better than those reported by Sissoko et al [3] in Mali: 0.89% and 20% and Mathew et al [6] in Australia: 0.45% and 20%.

The frequency of anal suppuration seems to be underestimated in the African population due to socio-cultural factors, in particular 'shameful disease' modesty and lack of information. In our study, we observed a predominance of young people.

This is also reported in the literature [7,8], with the average age varying between 37 and 41 years. Our results are comparable to those of Bagny A et al [9] in Togo, who reported an average age of 31.8 ± 14.3 years, with extremes of 17 and 83 years. They noted a predominance of the 30-40 age group(38.8%). But lower than that of Damian GO et al [10] who reported in 2015 a mean age of 49 years with extremes of 28 and 78 years and higher than those of :

- Charua GL et al [11] in Mexico in 2004 who noted a mean age of 34 years;
- Hrra A et al [12] in Morocco in 2001, who reported an average age of 37.

Young age is a risk factor for anal suppuration [13]. In our study, as in most studies [5,7,13], anal suppurations were found mainly in male subjects.

Our result is better than that of Errabih et al [14], who found that 61.23% (5787) of men had anal suppurations compared with 38.76% (3661) of women, with a sex ratio of 1.579. In our series, blue-collar workers were the socio-professional group most affected, followed by civil servants. Anal discharge was the most common functional sign in our study, followed by anal pain. The same finding was noted by Hrra A et al [12] in Morocco (90.8%). This would explain why perianal discharge is the main symptom of anal suppuration. The average admission time for our patients is significantly lower than that of Loungnarh R et al [15] in 2004 in the USA, who found an average admission time equal to 30 months. This result could be explained by certain traditional medical practices and self-medication in African societies. Acute forms of anal suppuration produce a rapidly progressive painsyndrome in the anal margin with the appearance of a red,

very painful swelling, which may be accompanied by insomnia and general signs of varying intensity. The chronic form may follow an abscess that is evacuated spontaneously or surgically, but may also appear immediately, characterised by a purulent perianal discharge through one or more external orifices. In our study, the physical signs were dominated by evidence of skin orifices and perianal discharge in equal numbers, marisci and anal swelling. Our result is comparable to that found in different series [16,17] where the cutaneous orifice was the obvious clinical sign on inspection of the anal margin. The external orifices found were single in 18 patients and multiple in 1 patient. On rectal examination, good sphincter tone was noted in the majority of our patients. Retroviral serology, haemogram, HBsAg and blood glucose were performed in all patients; fistulography in 4 patients, and stool parasitology in 10 patients. Anal suppuration is treated exclusively surgically. The aim is to dry up the suppuration while preserving anal continence [18, 19]. Treatment of abscesses is urgent and relies on surgical drainage, whereas treatment of the fistula requires careful exploration to separate it from other suppurations in the ano-perineal region. In our study, locoregional anaesthesia was the most common type of anaesthesia used in our patients (n=18), followed by general anaesthesia in 3 patients. All abscesses were surgically drained. For fistulas, fistulectomy was the most common surgical procedure, followed by fistulotomy and fistulectomy+suture. All our patients received venous access and medical treatment with antibiotics, analgesics and local care. Some authors [20, 21] have reported similar results, and others [12] have used slow sectioning with elastic thread in their patients. Our results are superior to those of Sissoko F et al [22] who reported the following in their study carried out in Mali:

- Fistulectomy+Haemorrhoidectomy 8.9% ;
- Fistulectomy+Fissurectomy 7.8% ;
- Fistulectomy+Haemorrhoidectomy+Fissurectomy 1.1%.

The choice of technique depends on the type of fistula, the



Figure 1: Horseshoe-shaped anal abscess.

muscle mass involved and the experience of the surgical team. At the fistula stage, flattening the fistulous tract remains the reference treatment because of its high cure rate [23]. In our series, the postoperative course was simple in the majority of cases (n=20) and we noted one case of recurrence of anal fistula. We did not record any cases of haemorrhage, anal incontinence or postoperative death. Sissoko F et al [22] in Mali reported that 89.9% of postoperative cases were simple, 77.9% incontinent of gas and 2.2% incontinent of faeces, liquids and gas. S n joux A [24] in France found 22 cases of anal incontinence (11%) and 3 cases of anal fistula recurrence (1.5%). Post-operative complications in primary anal fistulas were rare and mortality nil in all series [6, 20]. Our result is inferior to that reported by Sissoko F et al [22] in Mali, who obtained a mean duration of 11.92 days (Figure 1,2).



Figure 2: Crypto-glandular anal fistula.

Conclusion

Anal suppuration remains by far the most frequent proctological disease in our practice. They constitute a real public health problem because they are underestimated in the African population due to socio-cultural factors, such as modesty, which is often the reason for delayed consultation. Diagnosis is essentially clinical. Treatment, which is always surgical, is based on surgical drainage in the acute form (abscess) and in the chronic form (fistula), which must involve the orifices (internal and external) and their course. The post-operative course is straightforward in most cases, but can sometimes be marred by recurrence and functional anal disability.

Conflict of Interest

None.

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