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Large Painful Bursae at Abeche Hospital: Epidemiological, Clinical, Therapeutic and Evolutionary Aspects

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Abstract

Introduction: Acute large bursae (ALB) are a frequent reason for emergency consultations. The aim of this study was to investigate the prevalence, clinical course, treatment and evolution of ALB at Abeche University Hospital. **Patients and Method:** This was a 45-month cross-sectional study from January 2020 to September 2023. Male patients of any age who had been admitted to and treated for acute large bursae at the Abeche University Hospital were included. Sociodemographic, clinical and therapeutic variables were studied. **Results:** Acute large bursae accounted for 7.92% of emergency admissions. The average age was 39.40 years. 60.27% of patients came from rural areas. The average consultation time was 4 days, ranging from a few hours to 18 days. The main reason for consultation was pain. Strangulated inguino-scrotal hernia was the most common, followed by acute orchi-epididymitis, accounting for 41.8% and 26% of cases respectively. Traditional treatment prior to consultation was attempted in 13.7% of cases. All patients were treated as emergencies, 41 of whom had received medical treatment. Of the patients treated surgically, orchidopexy was performed in all. Parietal suppuration and anaemia occurred in 6.2% and 4.8% of cases respectively. **Conclusion:** A accounts for a significant proportion of our emergency care activity. However, patients are seen with a delay, which jeopardises the functional prognosis of the testicle and intestine.

Keywords

Acute Large Bursa, Orchiepididymitis, Torsion, Spermatic Cord, CHU-A

1. Introduction

Acute large bursae (ALB) are a frequent reason for consultation in urology [1] [2].

Worldwide, the exact prevalence of acute large bursae in the literature is unknown. However, in the United States, a study carried out in 2019 showed that the annual incidence of testicular torsion in boys under 18 years of age is approximately 3.8 per 100,000 [3]. In another study, orchi-epididymitis was the most common cause of acute scrotal pain in adults [4]. They include all painful bursae, whether traumatic or not, with or without open lesions, and whether infected or not. What they have in common is pain and swelling of the bursa, thus posing a problem of differential diagnosis [5] [6]. The aim of our study was to report on the epidemiological, clinical and therapeutic aspects of acute large bursae in the context of our practice.

2. Patients and Method

This was a 45-month cross-sectional study from January 2020 to September 2023. All male patients of any age who received and were treated for GBA at the Abeche University Hospital and who had a complete follow-up file were included. Patients admitted for large, non-painful bursae were not included in this study. The variables studied were socio-demographic (age, sex, profession, level of education, lifestyle), clinical (circumstances of onset, consultation times, history, type of emergency), paraclinical and therapeutic. A data collection sheet has been drawn up. Data were collected and analysed using SPSS 11.0 software. Calculations were made using proportions and the mean, and statistical significance was considered with $\alpha = 5\%$. Patient consent was obtained and confidentiality was paramount. Authorisation for the research was granted by the Faculty of Health Sciences of UNABA and the University Hospital of Abeche.

3. Results

During the course of the study, 146 patients out of 1843 consulted for GBA, *i.e.* 7.92% of cases. The average age was 39.40 years [2 months to 80 years]. These patients came from rural areas in 60.27% (n = 88) of cases Married patients accounted for 52.7% (n = 77) of cases and farmers/breeders for 38.4% (n = 56). The location of a large painful bursa on the right in patients represented 54.8% (n = 80) of cases. The average consultation time was 4 days, ranging from a few hours to 8 days. The main reason for consultation was pain. It was associated with fever in 40.4% (n = 59) of cases, nausea and vomiting in 19.9% (n = 29) of cases, and cessation of bowel movements and gas in 16.4% (n = 16) of cases. Strangulated inguino-scrotal hernia was the most common, followed by acute orchi-epididymitis, accounting for 41.8% and 26% of cases respectively (**Table 1**).

Figure 1 shows that the 26 to 35 age group predominates (n = 46).

Conventional treatment was attempted in 13.7% (n = 20) of cases. All patients

were treated as emergencies, 45 of whom had received medical treatment. The most common emergency surgical procedures were hernia repair followed by trimming, accounting for 60.39% and 20.97% of cases respectively (Table 2).

After-effects were marked by parietal suppuration in 6.2% and anaemia in

Table 1. Distribution by frequency.

Diagnostic	N	%
Orchi-epididymitis	38	26.0
Spermatic cord torsion	12	8.2
Inguino-scroo hernia	61	41.8
Fournier Gangrene	13	8.9
Trauma to the bursa	4	2.7
Phlegmon of the bursa	9	6.2
Scrotal abscess	5	3.4
Engorged inguino-scrotal hernia	4	2.7
Total	146	100

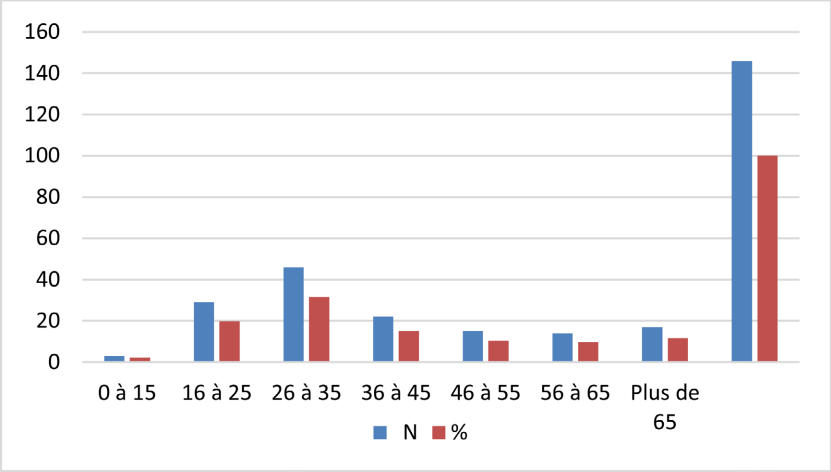

Figure 1. Distribution of patients by age group.

Table 2. Distribution by type of surgical procedure.

Effectif	n	%
Hernia repair	61	60.39
Orchidectomy + contralateral orchidopexy	3	2.97
Bilateral orchidopexy	9	8.91
Bypass cystotomy	11	10.89
Flattening	5	4.95
ParagTrimming	21	20.97
Surgical exploration of the testicles	2	1.98

4.8%. The death rate was 2.7%. The average length of hospitalisation was 7 days (3 days to 1 month).

4. Discussion

Acute large bursae accounted for 7.92% of emergency admissions. However, it should be noted that the completion of this work was limited by the lack of iconography due to the retrospective nature of the study. This result is consistent with the literature [1] [6]. The average age was 39.40 years (2 months to 80 years). GBA affects all age groups in different proportions. This is explained by the diversity of their aetiologies. The same observation was made by Laura and Diabaté, who reported respectively 40.2 ± 17.3 and 42.25 years of age [1] [7]. The patients came from a rural area in 60.27% of cases. This high rate of rural origin is explained by physical activity, which is a factor favouring inguinal hernia. The average consultation time was 4 days, ranging from a few hours to 8 days. This short consultation time in our practice context is explained by the symptomatology of GBA, as all patients had presented with scrotal pain associated with enlarged bursae.

However, if these symptoms occur, the patient should seek medical advice without delay. All patients presented with scrotal pain. Scrotal pain was associated with fever in 40.4% of cases, and with cessation of fluid and gas in 16.4% of cases. The symptoms of GBA vary and depend on the aetiology, which may be mechanical, infectious or traumatic. However, the common feature of the symptoms is a painful increase in the volume of the bursa. Strangulated inguino-scrotal hernia (SISH) was the most common aetiology, followed by acute orchi-epididymitis, accounting for 41.8% and 26% of cases respectively. The aetiologies of GBA are reported in the literature [1] [8] [9]. All patients were treated as emergencies, with 101 receiving surgical treatment and 45 only medical treatments. This confirms that large painful bursae are medical and surgical emergencies. Diabaté in his series found 57.9% for medical treatment and 42.1% for surgical treatment [1]. There should be no delay in the management of GBA, as the patient's functional or even vital prognosis may be at risk. The most common emergency surgical procedures were hernia repair followed by trimming, accounting for 60.39% and 20.97% of cases respectively. These procedures are proportional to the aetiologies found.

5. Conclusion

Acute large bursae are a fairly frequent pathology in urological consultations at CHU-A. They can occur at any age. The therapeutic route is fairly long, involving self-medication, traditional treatment, unqualified nursing staff and the urological surgeon as a last resort. They are often under-diagnosed and diagnosed late, when complications arise. There are a variety of aetiologies, the most frequently encountered being strangulated inguino-scrotal hernia, orchi-epididymitis, torsion of the spermatic cord, Fournier's gangrene, scrotal abscesses, etc. The diag-

nosis is clinical, and can sometimes be confirmed by Doppler ultrasound. Management is medical and surgical, with almost constant use of antibiotics, NSAIDs and/or analgesics, whatever the type of treatment. The immediate after-effects were straightforward in most cases, but infections were the main post-operative complication.

Conflicts of Interest

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

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