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Original Research Article

Epidemioclinical and Therapeutic Study of Fractures of the Penis at the Csréf of Markala

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Abstract

The aim was to carry out an epidemioclinical and therapeutic study of fractures of the penis at the Csréf in Markala. ***Patients and methods:*** This is a retrospective prospective descriptive study of 13 cases of fracture of the penis during four years at the Csréf of Markala from 01 January 2019 to 01 January 2023. All patients who had a treated penis fracture were included in our study. All patients who had other forms of trauma to the penis other than a penis fracture were excluded. ***Results:*** The frequency of fracture of the penis was 14.8% compared to other urological injuries. The average age of our patients was 36.30 years with extremes ranging from 25 to 54 years. 53.8% of our patients were single. The average consultation time was 14.8 hours, with extremes ranging from 3 hours to 47 hours. The approach was longitudinal in some cases and in other cases a circumferential incision or at the level of the balano preputial fold. The most frequent complications were penis bending, with 15.5% (2 patients), urethral fistula was observed in one patient (7.7%), and we also noted cases of fibrosis of the erectile bodies (23.1%). ***Conclusion:*** The fracture of the penis is a real uro-andrological emergency, and the treatment must be rapid and effective in order to avoid irreversible after-effects, which may even lead to erectile dysfunction or urethral stricture in these patients. The approach must be appropriate in order to prevent short, medium and late complications.

Keywords: Fracture of the penis, urology deases-Mali.

INTRODUCTION

The fracture of the penis is a solution of continuity of the albuginea of the corpora cavernosa. It is a urological and andrological emergency, often occurring during coitus "faux pas" during sexual intercourse or during untimely manipulation with torsion of the erect penis [1]. Its diagnosis is purely clinical and easy to establish, depending on the circumstances of its occurrence on a tumescent penis and causing a tear in the albuginea of the corpora cavernosa with extravasation of the blood contained in these organs, at the level of the envelopes of the penis. It may be associated with a rupture of the spongy urethra and leads to micturition disorders [2]. It is a real urological emergency and its rapid and effective initial management could have a positive impact on the good functionality of the copulation organ, hence the interest in carrying out an epidemioclinical and therapeutic study of penis fractures based on 10 cases at the Markala Csref.

PATIENTS AND METHODS

This is a retro prospective descriptive study of 13 cases of fractured penis during four years at the Csréf of Markala from 01 January 2019 to 01 January 2023. All patients who had a treated penis fracture were

included in our study. All patients who had other forms of trauma to the penis other than a penis fracture were excluded. Data were collected on a survey form from the consultation record book and the operating theatre report book, and the following parameters were studied: age, marital status, history, clinical data, surgical exploration data and treatment results and postoperative complications. The data were entered into Windows Excel 2007 from the survey forms and analysed in SPSS version 21.0.

RESULTS

Table 1: Distribution of patients according to the frequency of fracture of the penis in relation to other urological injuries

Pathology	Frequency	Percentage
EMB Trauma	06	6,8
Edema of the penis	02	2,3
Fracture of the penis	13	14,8
Swelling of the bursa	26	29,5
Other	41	46,6
Total	88	100

The frequency of fracture of the penis was 14.8% compared to other urological traumas

CHART I: distribution of our patients according to their age

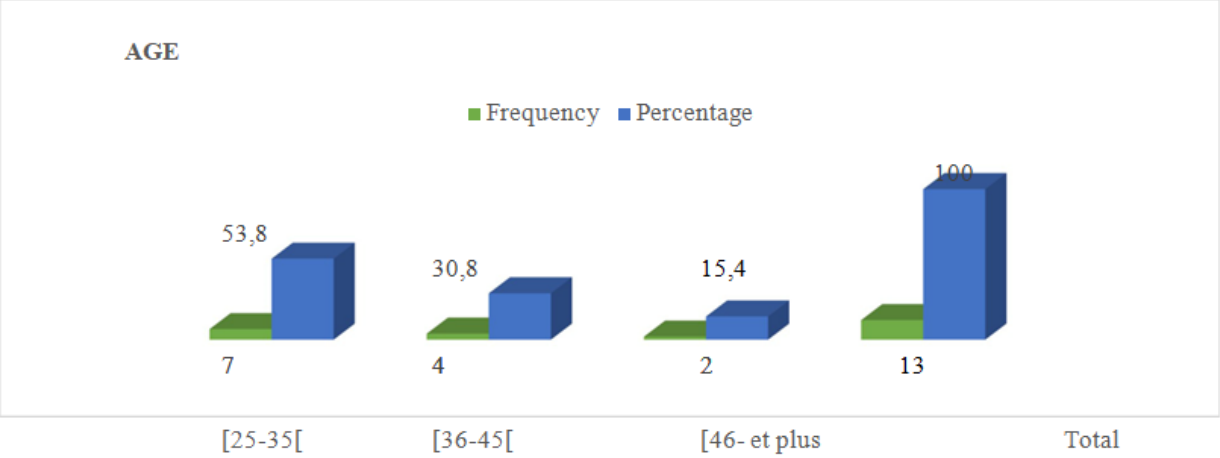
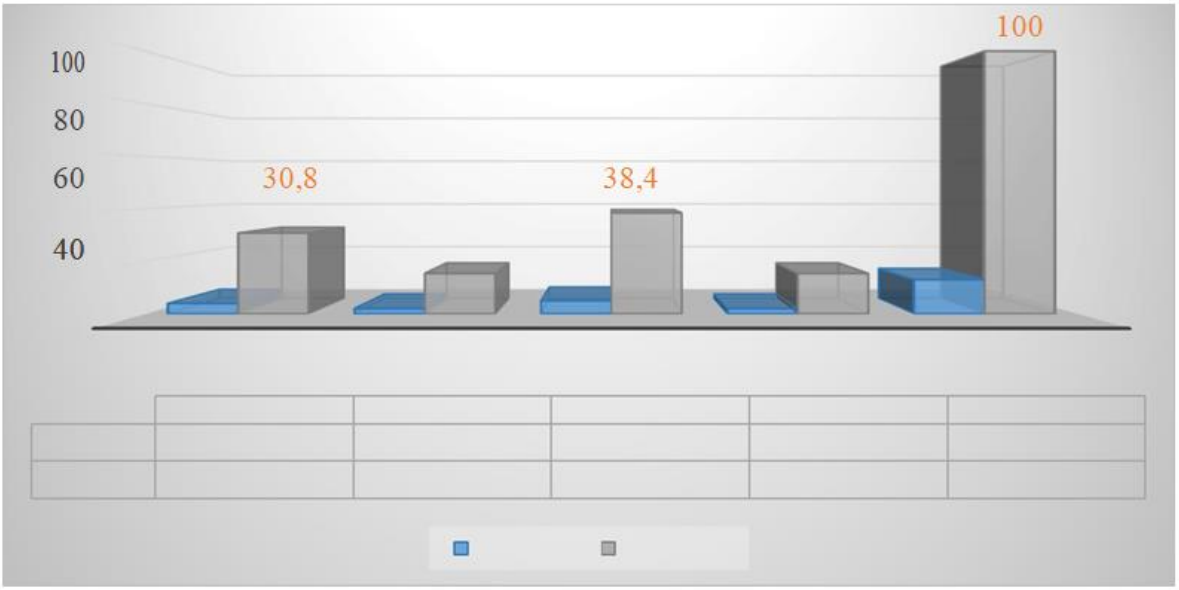


CHART III: Distribution of patients according to consultation time in hour

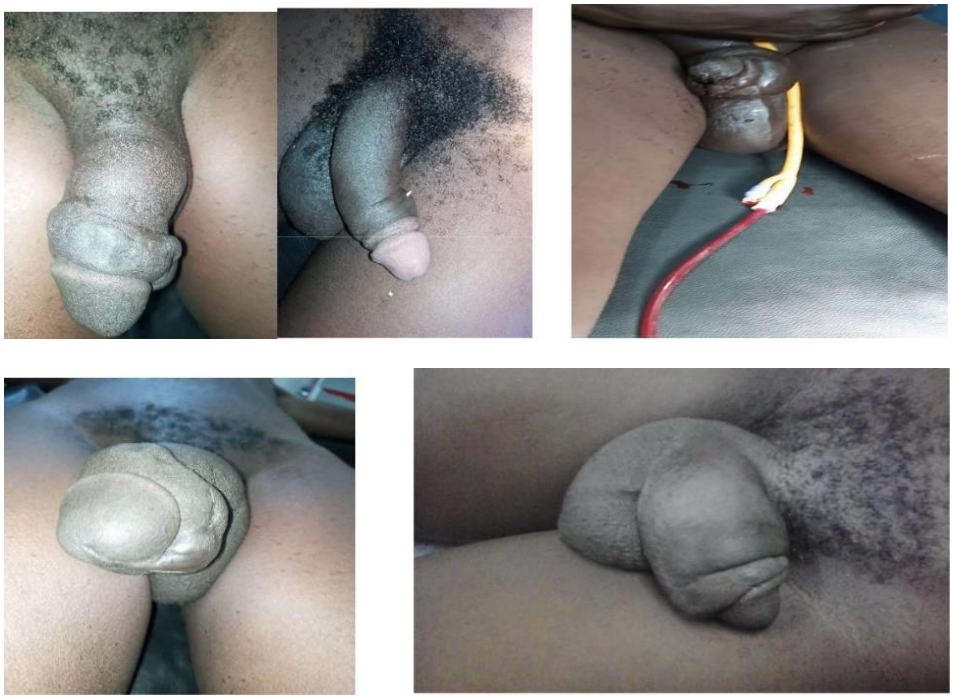


The average consultation time was 14.8 hours with extremes of 3 hours to 47 hours. The clinical data were marked by various symptomatologies such as severe pain in the penis, i.e. 95%, swelling of the penis accompanied by the perception of cracking, followed by deformation with deviation of the penis away from the lesion. Medical treatment consisted initially of anti-inflammatory medication and local cooling with an ice bladder. This should only be done after all doubts about a possible real fracture of the penis have been eliminated.

The surgical treatment consisted of evacuation of the haematomas and suture of the albuginea of the torn corpus cavernosum in the first few hours after the fracture under spinal anaesthesia or local anaesthesia at the root of the penis. The approach was longitudinal in some cases and in other cases a circumferential incision or at the level of the balano preputial groove. A fracture with total section of the urethra which required a urethroplasty with terminal anastomosis of both stumps on a ch16 silicone catheter with 5cc in the balloon.

The most frequent complications were penis curvature, with 15.0% or 2 patients, urethral fistula was observed in one patient or 7.7%, we also noted cases of fibrosis of the erectile bodies or 23.1%.

Some iconographies of our activities



Fracture of the Penis

COMMENT AND DISCUSSION

In Africa, sexuality is still a taboo subject in the 21st century because of our religious and customary values, although its frequency is relatively rare. It is an andrological emergency and the first publication on this subject seems to be by FRANK in 1807[2]. Since then, only a limited number of series have been reported, the largest being that of Zargooshi [5] in 2009 with 352 patients. However, this scarcity in the literature is only a reflection of under-reporting. In our series, we collected 13 cases of fractured penis of different types of lesion with 14.8% of our activities during the study period, without counting some cases not notified by some of our colleagues due to lack of knowledge of the diagnosis. The survey of urologists in the state of Arkansas in the USA found 25 unpublished cases [6]. This low incidence of case reporting may be due to the sensitivity of the subject to the extent that these fractures occur or in the context of infidelity which may have a social impact within their community.

The average age of our patients was 36.30 years with extremes ranging from 25 to 54 years. In the series by Barry M et al. the average age was 37.8 years with extremes of 22 and 51 years. It was also 31.6 years with extremes of 23 and 45 years for SYLLA et al [2], 33.8 years with extremes of 21 and 61 years for Yamaçake et al [8] and 25 years with extremes of 14 and 50 years for Nawaz et al [9]. Young adults are the most affected in the literature, which corresponds to a period of intense sexual activity that could be associated with the use of sexual stimulants (aphrodisiacs) often in search of a strong sexual sensation at the cost of a fracture of the penis following the faut pas de koït, whose erect penis strikes the perineal region with his spouse or extramarital in most cases.

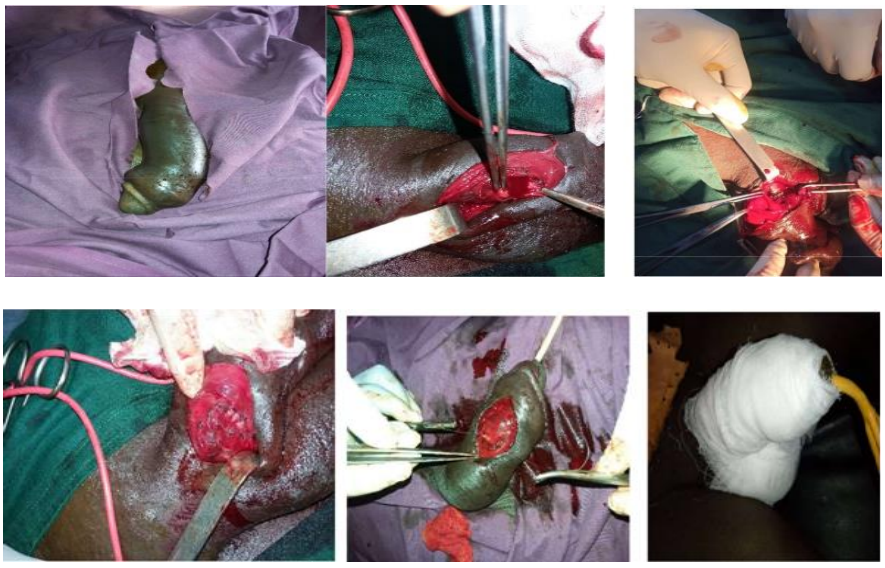
The consultation time varies from a few hours to a few days depending on whether the fracture is seen early or late, whether it involves one or two corpora cavernosa and sometimes associated with lesions of the urethra. If haematoma is frequent and its size is variable, its extension also depends on the integrity of Buck's fascia [10,11]. In our study the average consultation time was 14.8 hours with extremes of 3 hours to 47 hours. It was 11 hours with extremes of 3 and 49 hours in the series by BARRY et al [7]. It varied from 2 hours to 7 days with 63.9% of patients within the first 24 hours for Rajandeep et al [12]. For Hussein [13], it varied from 2 to 10 hours. Our consultation time is somewhat similar to that of Barry et al [7], which allows us to say that the consultation time varies according to the severity of the lesions and the decision taken by the patients to consult. In the literature, the most frequent and most evocative aetiology in our series is coital malpractice, although cases of untimely manipulation of the penis [14,15] or involuntary shocks [16,17,18] to an erect penis may also be involved. In the case of coitus faux pas, the accident occurs following violent or "acrobatic" coitus, where the penis misses the vaginal orifice and strikes the perineum, pubis, inner thigh or buttock. More exceptionally, a penis fracture can occur on a flaccid penis [3, 17, 18].

However, it is important to bear in mind that there are also false yard fractures, which are similar in clinical examination and would lead to unnecessary surgical management. The false penis fracture is a described differential diagnosis that occurs in the same circumstances, accounting for about 5% of suspected penile fractures. The patient describes the occurrence of a haematoma, pain but without immediate cracking or detumescence. The haematoma in the false penis fracture is most often due to a tear in the dorsal vein superficielle. Conservative treatment will be proposed in patients presenting with a clinical picture suggestive of a false fracture (small haematoma or haemorrhagic suffusion. The treatment consists of anti-inflammatory drugs and local cooling with an ice bladder. It should be done only after eliminating any doubt about a possible true penile fracture [19].

Anti-androgens and benzodiazepines to limit erections during the recovery period can be used.The anatomical arrangement of the urethra in relation to the corpus spongiosum means that its injury is often accompanied by that of the latter. The surgical approach varies according to the suspected lesions, the aim being to evacuate the haematoma and suture the albuginea. The choice of approach is very important, however a coronal incision with a freeing of the penis allows better exposure of the lesions, especially in the case of associated urethral damage. It allows not only a good complete exploration of the three bodies of the penis up to the penoscrotal groove [21, 22] but also the preservation of the freedom of sliding of the penis sleeve. It avoids scarring fibrosis resulting from the confrontation of the cavernous suture and the skin during the direct approach [21]. It should also be noted that we had to use the longitudinal approach because of the anatomical situation of the lesion in two patients. In some of our cases the section of the urethra was partial, in other cases the section was total in one case where we proceeded to do a terminal anastomosis urethroplasty on a Ch 16 silicone catheter with 8 cc in the balloon.

The evolution of three of our patients was marred by erectile body fibrosis and one case of urethral fistula. For the cases of fibrosis of the erectile bodies we proceeded to a corticotherapy by way of infiltration which was very satisfactory and the case of fistula was managed by the indwelling catheter during three weeks.

Some peroperatory images of some of our patients



CONCLUSION

The fracture of the penis is a real uro-andrological emergency, and the treatment must be rapid and effective in order to avoid irreversible after-effects, which may even lead to erectile dysfunction or urethral stricture in these patients. The approach must be appropriate in order to prevent short, medium and late complications.

Conflict of Interest: None

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