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Penile fracture revealed by acute painless swollen scrotum: Case report

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ABSTRACT

Penile fracture (PF) is a relatively common trauma described in the literature. When occurred during a blunt sexual trauma, clinical findings are classical. We report our first case managed at a rural hospital of West Cameroon region. This was a case of PF without eggplant deformity nor pain but a swollen scrotum (SS) and auto-medication history. PF was confirmed by ultrasound; indication for surgery was established. Surgery and postoperative period were uneventful. Acute painless SS could reveal PF, but the absence of spontaneous pain when PF is suspected suggests an investigation looking for the use of pain killers.

1. Introduction

Penile fracture (PF) is a relatively common trauma well described in the littérature. When occurred during a blunt sexual trauma, the clinical findings are classical: a cracking (pop-up) sound, followed by rapid detumescence of the erect penis and intense local pain; then haematoma, bruising and characteristic deformity known as 'eggplant deformity' of the penis.[1] Delayed diagnosis and treatment can lead to erectile dysfunction. Diagnosis is clinical; ultrasound and retrograde urethrography are routine tests prescribed to confirm the diagnosis and rule out urethral rupture.[2] PF with normal physical findings or with swollen scrotum (SS) associated with significant pain are rare and were reported.[3],[1] Here we report our first PF case managed at a rural hospital of West Cameroon region. This was an in solite case of PF without deformation in eggplant nor pain but SS as the principal complaint. This observation is reported with the aim to add another presentation of penile fracture in the literature.

2. Case presentation

A 29 year-old man with no particular history of pathology presented to our hospital center with a complaint of acute painless SS occurred while having masturbation. History revealed that 24 h prior consultation, a cracking (pop-up) sound, sudden proximal penile pain, and SS occurred during masturbation. He made an auto medication with Ibuprofen tablet (400 mg x 3/d). Our examination revealed SS painless with negative transillumination, a swollen penile albeit not to an eggplant degree, and painful penoscrotal region when palpated (Fig. 1). Patient was able to pass urine and there was no heamaturia. Ultrasound was performed in another center far from 40 km. Result of penile and scrotal ultrasound was available five days later, showing: a heterogeneous hypoechogenic collection of 37.0 × 25.9 × 34.1mm, i.e. a volume of 17.16 ml opposite the discontinuity of the albuginea on the ventral side of the corpus cavernosum; - a homogeneous spongy body; - a urethra without abnormality in its anterior and posterior portions; - a significant thickening of the bilateral scrotal tunics and a right non-communicating hydrocele of small abundance (volume = 9.5 ml). The diagnosis of PF was confirmed and the indication for surgery was established. The patient has been informed of the risks involved and his consent has been obtained. The patient was placed in the dorsal decubitus after transurethral bladder catheterization with an 18 Fr Foley's catheter and rachi-anaesthesia. A scrotal incision on the median raphe extending 1 cm over the ventral side of the penis (Fig. 2 A) allowed evacuation of a haematoma with numerous blackish blood clots (Fig. 2 B). We have discovered a transversal breach of about 8 mm on the ventral side at the base of the right corpus cavernosum (Fig. 2 C). Bleeding started after evacuation of the haematoma; we performed an overjet of 4/0 absorbable thread to obtain hemostasis and close the albuginea (Fig. 3 A). A scrotal glove finger was left subcutaneously (Fig. 3 B) under a penoscrotal dressing (Fig. 3 C). Post operative period was uneventful. The glove finger and urinary catheter were removed on the third postoperative day; the patient was discharged on the fifth postoperative day. Prognosis was good 8 weeks later with normal erection.

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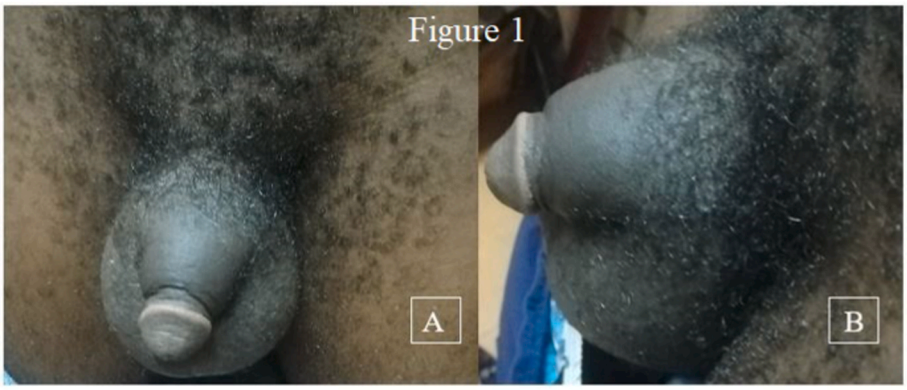

Fig. 1. Swollen scrotum without penile deformity, front view (A), side view (B).

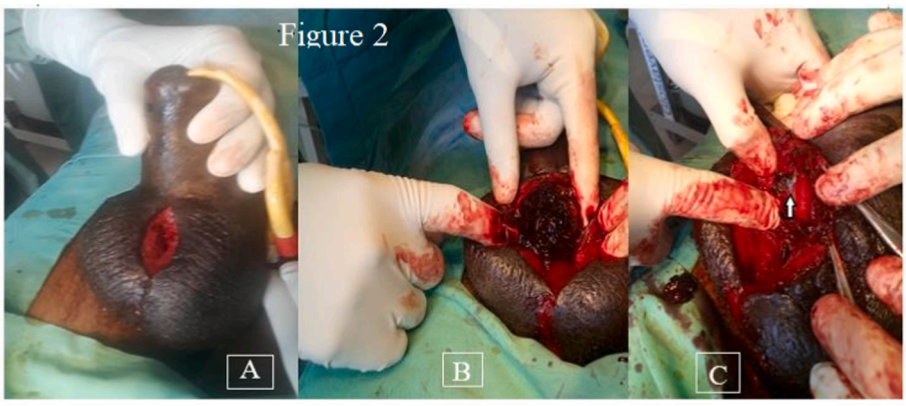

Fig. 2. Peroperative images; scrotal incision (A), evacuation of haematoma with numerous blackish blood clots (B), transversal breach of about 8 mm on ventral side at the base of the right corpus cavernosum showing by white arrow (C).

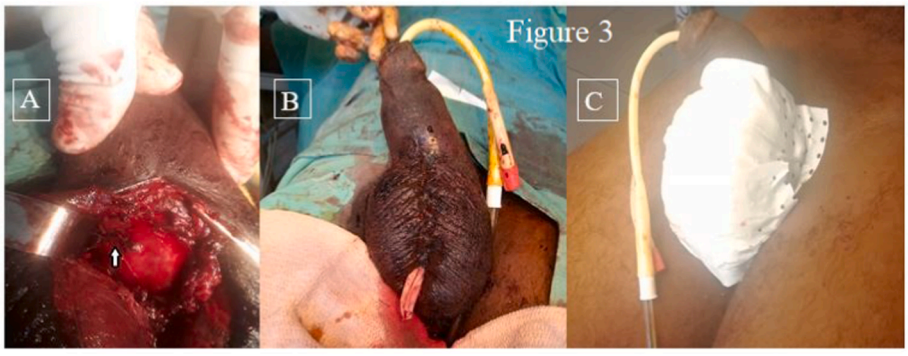

Fig. 3. Peroperative images; suture of the albuginea of the right corpus cavernosum indicated by white arrow (A), scrotal glove finger left subcutaneously (B), penoscrotal dressing (C).

3. Discussion

PF occurs only during erection and in the literature, trauma during sexual intercourse is more incriminated than masturbation.[1] Delay in presentation is mainly due to fear and embarrassment[3]; in our case it was due to the distance from the hospital and the limited technical facilities. PFs are commonly diagnosed by their stereotypical clinical presentation.[1] Patients commonly report hearing a cracking sound from the erect penis at the moment of injury. Detumescence occurs rapidly, and acute swelling, pain, and penile deformity follow.[2] Clinical findings were different in our patient, with absence of eggplant deformity but a swollen penile, sudden proximal penile pain, and a painless swollen scrotum. The pain can vary from minimal to severe and is not proportional to the degree of injury.[1] However, self-medication with ibuprofen could explain the absence of spontaneous penile pain when presented at hospital. False PF is a described differential diagnosis that occurs in the same circumstances, accounting for about 5%.[2] Patient describes the appearance of a haematoma; pain but without immediate cracking or detumescence. Haematoma in the false penile fracture is most often due to tearing of the superficial dorsal vein.[2] In case of doubt, as in our presentation, a true penile fracture should be ruled out with ultrasound, as it provides a fast noninvasive alternative to MRI and cavernography.[3,4] Normal micturition and the absence of haematuria lead to the conclusion that there was no urethral involvement. Usually, retrograde

urethrography is performed when urethral injury is suspected.[5] More interesting patient was in poor financial condition and there were limited technical facilities. Breach is most often unilateral, right, transverse, on the dorsal surface of the corpus cavernosum.[2] Conversely, in our case, there were a transversal breach on the ventral side at the base of the right corpus cavernosum (Fig. 3). An elective incision is possible when the breach is proximal and clearly identified clinically or radiologically.[2] That was the reason we chose a scrotal incision on the median raphe extending 1 cm over the ventral side of the penis. Surgical principles are: evacuation of haematoma; - haemostasis of the vessels: bleeding of venous or arterial origin; - suture of the albuginea tears of the corpus cavernosum; - if necessary, a surgical suture of the urethral mucosa and spongiosa is done. Our intervention has various limitations, which constitute an important part of the weakness. We used an overjet of 4/0 vicryl, but ideally reverse sutures with 3/0 vicryl are recommended.[1,3]

4. Conclusion

Acute painless SS could reveal PF, but the absence of spontaneously pain when PF is suspected suggests an investigation looking for the use of pain killers: this is suggested by our case report.

Consent

Written informed consent was obtained from the patient for publication of this case report and accompanying images.

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Authors contributions

Stéphane Kohpe Kapseu: Conceptualization, data collection, case analysis and writing of the manuscript.

Ti**éoulé Mamadou Traore:** Supervision, validated the case.

Declaration of competing interest

Nil.

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