EAS Journal of Radiology and Imaging Technology
Abbreviated Key Title: EAS J Radiol Imaging Technol
ISSN: 2663-1008 (Print) & ISSN: 2663-7340 (Online)
Published By East African Scholars Publisher, Kenya

OPEN ACCESS

Volume-5 | Issue-3 | May-Jun-2023 | DOI: 10.36349/easjrit.2023.v05i03.011

Case Report

Penile Fracture: A Case Report

Boui Meriem[1*], Sassi Soufiane[2], Zouaki Zakaria[1], Sirbou Rachid[3], Karmouch Yassine[4], Benazzouz Abderrazak[4], Nabil Hammoune[1], Badr Slioui[1], El Mehdi Atmane[1], Abdelilah Mouhsine[1]

[1]Department of Radiology Avicenne Military Hospital, Marrakech, Morocco
[2]Department of General Surgery, Avicenne Military Hospital, Marrakech, Morocco
[3]Department of Emergency, Avicenne Military Hospital, Marrakech, Morocco
[4]Department of Urology, Avicenne Military Hospital, Marrakech, Morocco

Article History
Received: 18.05.2023
Accepted: 12.06.2023
Published: 17.06.2023

Journal homepage:
https://www.easpublisher.com

Quick Response Code

Abstract: Rupture of the corpora cavernosa, also called penile fracture, is a rare urological emergency; it is a tear in the tunic albuginea of the corpora cavernosa of variable depth and extent up to the urethra, generally occurs in young adults between 20 and 40 years old, most often following trauma to the erect penis. The diagnosis is essentially clinical, but it is recommended to perform an ultrasound. Ignorance of this urological emergency exposes you to complications that can be disabling. We report the case of a 25-year-old patient with a fracture of the penis following a false step during coitus who was operated on and with simple postoperative consequences.

Keywords: Corpora cavernosa, young adults, penile fracture, tunica albuginea, urological emergency.

INTRODUCTION

Rupture of the corpora cavernosa also called penis fracture is a rare urological emergency; it is a tearing of the tunica albuginea of the corpora cavernosa of variable depth and extent up to the urethra. It most often occurs following trauma to an erect penis. Clinical diagnosis is essentially clinical. However, ultrasound can be used. Ignorance or ignorance of this urological emergency exposes you to complications that can be disabling. We report the case of a 25-year-old patient with a penile fracture.

CASE REPORT

We report the case of a 25-year-old young man, with no particular history, married without children, admitted to the emergency room for swelling and pain in the penis following a misstep during coitus. The erect penis would have stumbled against the perineum of his partner. Pain, a cracking sensation and immediate detumescence ensued. On examination, the patient was in good general condition but anxious. Examination of the urogenital system showed a deviation of the penis to the left with generalized but more accentuated edema on the right side. The skin was purplish next to the site of the lesion with a hematoma giving the typical appearance of an "eggplant" penis (Fig 1). Palpation aroused exquisite pain at the level of the fracture focus radiating to all the external genitalia as well as to the hypogastric region. The rest of the examination was unremarkable. The patient also benefited from a penile ultrasound which objectified a fracture of the tunica albuginea with a hematoma of the right corpus callosum measuring 7x4cm, with respect for the spongy body and a normal appearance of the testicles. The diagnosis of penile fracture was retained. The emergency preoperative assessment, essentially consisting of a blood count and blood and rhesus group, was normal and allowed surgery. The patient had undergone spinal anesthesia. The intervention consisted of a direct approach via an elective incision on the induration, which made it possible to highlight a longitudinal fracture of 15 mm in length involving the tunica albuginea on the dorsal surface of the right cavernous body (Fig 3A). After evacuation of the hematoma, the edges of the fracture line were sutured using separate stitches with Vicryl 3-(Fig 3B). The post-operative follow-up was simple, the patient was seen again in a follow-up consultation with normal

***Corresponding Author:** Boui Meriem
Department of Radiology Avicenne Military Hospital, Marrakech, Morocco

erectile function, without induration or fibrosis next to the incision or bend in the penis.

Figure 1: Appearance of eggplant penis following a misstep of coitus during sexual intercourse

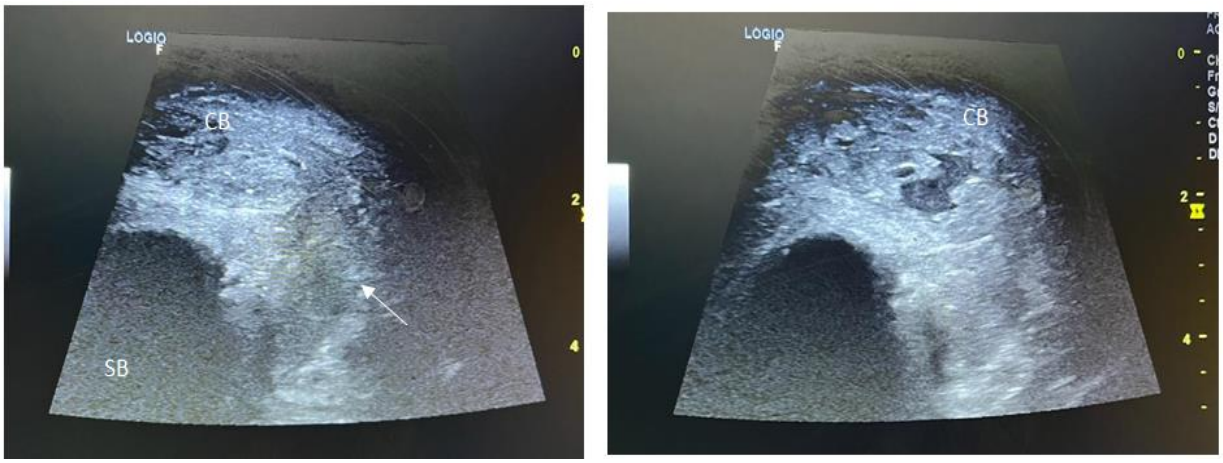

Figure 2: Tunica albuginea fracture with significant infiltration and edema of the cavernous body (white arrow) SB: Spongy Body, CB: Cavernous Body

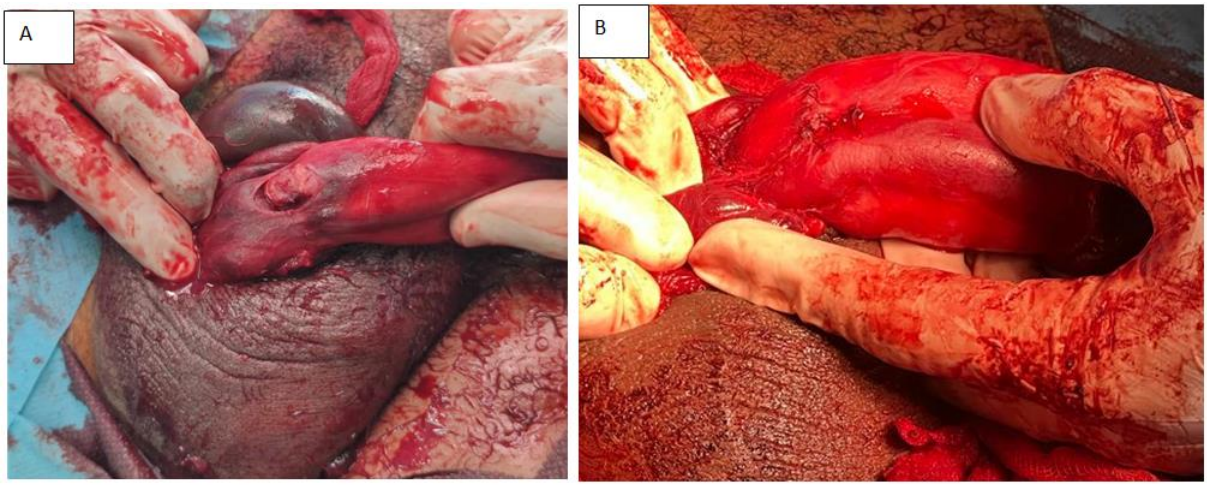

Figure 3: A) Line of fracture of the tunica albuginea of the dorsal surface of the right cavernous body, B) After evacuation of the hematoma, the edges of the fracture line were sutured using separate stitches

DISCUSSION

Diagnosis is mainly based on clinical examination. He rediscovers the notion of cracking with pain. One quickly observes a swelling as well as a deformation of the penis with deviation on the opposite side of the fracture. A hematoma of variable importance sets in with a typical "eggplant" appearance [1, 2]. In some cases, a clot may be palpable at the level of the

fracture zone, the "rolling sign" [3, 4]. Associated lesions should be sought during the history and examination. Rupture of the urethra is present in 10 to 33% of cases and can cause macro- or microscopic urethrorrhagia, dysuria and acute urinary retention [5]. Other attacks of the dorsal artery of the penis or the deep dorsal vein are visible by the presence of a butterfly-wing perineal hematoma [4]. When the diagnosis is made, treatment is immediate surgery. In case of diagnostic doubt, imaging is indicated to decide on the surgical approach as well as the search for associated lesions. One of the differential diagnoses is the false fracture of the penis. The clinical picture is similar but without the notion of cracking or rapid tumescence. This is a tear in the superficial dorsal vein, which does not require surgery [4]. The other important diagnosis to be evoked is that of a "closed" fracture of the cavernous body. It occurs during sexual intercourse associated with a crack but without hematoma or visible edema.

The aspect of the penis is little modified. The long-term prognosis is the same with risk of erectile dysfunction and fibrosis. Diagnostic imaging is also recommended [6]. There is no consensus on the role of imaging in diagnosis. The most recent articles propose in case of doubt the realization in first intention of a penile MRI, the most efficient examination but of variable availability. Ultrasound is offered as a second-line option, with operator-dependent results, however [4, 7]. Prompt contact with the surgeon is essential. The response time should be as short as possible. The value of surgery persists even for patients seen late but with a higher risk of intra- and postoperative complications. In the absence of treatment, the patient may have fibrotic sequelae with erectile dysfunction and curvature of the penis or urethrocavernous fistulas [5]. The treatment is surgical. It consists of evacuating the hematoma, achieving effective hemostasis, suturing the tunica albuginea and exploring the contralateral corpus cavernosum. A fibroscopy will be performed intraoperatively at the slightest doubt of urethral lesion.

CONCLUSION

The frequency of the fracture of the penis or rupture of the corpora cavernosa seems underestimated in black Africa. We have identified five cases in seven years of activity. It is a pathology that is part of urological emergencies. The etiologies are varied but dominated by the misstep of coitus in our short series. Diagnosis is essentially clinical, but imaging can be useful in contentious cases. Spontaneous progression to complications requires appropriate therapeutic management without delay. The different modalities that are: surgery and medical treatment include various methods whose final objective is to put the penis to rest. However, the preponderant role of surgery seems established nowadays, particularly in the prevention of sequelae.

Conflicts of Interest: The authors declare that they have no conflicts of interest.

REFERENCES

1. Paré, A. K., Ouattara, A., Botcho, G., Kirakoya, B., Kaboré, F. A., Bako, A., ... & Kambou, T. (2019). La fracture de verge: à propos de six observations au CHU Sanou Souro de Bobo-Dioulasso, Burkina Faso. *The Pan African Medical Journal*, *33*.
2. Diarra, A., Mahamat, M. A., & Kassogué, A. (2019). La fracture de la verge à propos de 2 cas au service d'urologie du CHU Luxembourg/Mali. *Mali Med*, *34*(4), 58-60.
3. Grima, F., Paparel, P., Devonec, M., Perrin, P., Caillot, J. L., & Ruffion, A. (2006). Prise en charge des traumatismes des corps caverneux du pénis. *Progrès en Urologie*, *16*, 12-18.
4. Kara, N., Journel, N. M., Ruffion, A., & Terrier, J. E. (2015). Quand et comment opérer les fractures de verges?. *Progrès en Urologie-FMC*, *25*(3), F73-F77.
5. Rivas, J. G., Dorrego, J. M. A., Hernández, M. M., Portella, P. F., González, S. P., Valle, J. A. M., & de la Peña Barthel, J. J. (2014). Traumatic rupture of the corpus cavernosum: surgical management and clinical outcomes. A 30 years review. *Central European Journal of Urology*, *67*(1), 88-92.
6. Wisard, M., Aymon, D., Meuwly, J. Y., Jichlinski, P., & Praz, V. (2008). Fractures «fermées» de la verge: à propos de deux cas. *Progrès en urologie*, *18*(9), 617-619.
7. Turpin, F., Hoa, D., Faix, A., Filhastre, M., Mazet, N., & de Vigne Lavit, J. R. (2008). IRM de la verge: intérêt dans le bilan post-traumatique. *Journal de Radiologie*, *89*(3), 303-310.

Cite This Article: Boui Meriem, Sassi Soufiane, Zouaki Zakaria, Sirbou Rachid, Karmouch Yassine, Benazzouz Abderrazak, Nabil Hammoune, Badr Slioui, El Mehdi Atmane, Abdelilah Mouhsine (2023). Penile Fracture: A Case Report. *EAS J Pharm Pharmacol*, *5*(3), 85-87