Case Report

Fracture penis: An interesting case report

Sankalp Dwivedi, Kunal Chowdhary, Amit Mittal[1], Mohinder Kumar

Departments of General Surgery and [1]Radiodiagnosis, MMIMSR, Mullana, Ambala, Haryana, India

Abstract

Penile fracture remains a rare, yet likely underreported condition. Fracture of the penis is a tear in the tunica albuginea of the corpora cavernosa that may be associated with injury to the corpus spongiosum and urethra. Diagnosis is usually clinical, and urethral injury should be suspected in the penile fracture, especially in those cases with bilateral cavernosal rupture. The usual cause is abrupt bending of the erect penis by blunt trauma most commonly during sexual intercourse. A crackling sound, pain, detumescence, bruising, swelling, and bleeding per urethra are the common symptoms reported by the patients. Early surgical management is the treatment of choice with a low incidence of complications. We report a case of fracture penis in a 35-year-old male came to the emergency out-patient department of our hospital.

Key words: Fracture, penis, swelling

Received: 10th June, 2015; ***Revised:*** 11th June, 2015; ***Accepted:*** 22nd June, 2015

INTRODUCTION

Penile fracture remains a rare, yet likely under reported condition. The first documented report of this injury was more than 1000 years ago.[1] More than 1600 cases of penile fracture have appeared in the medical literature to date.[2] Fracture of the penis is a tear in the tunica albuginea of the corpora cavernosa which may be associated with injury to the corpus spongiosum and urethra.[1] Diagnosis is usually clinical, and urethral injury should be suspected in the penile fracture, especially in those cases with bilateral cavernosal rupture.[3] The usual cause is abrupt bending of the erect penis by blunt trauma most commonly during sexual intercourse. A crackling sound, pain, detumescence, bruising, swelling, and bleeding per urethra are the common symptoms reported by the patients. Early surgical management is the treatment of choice with a low incidence of complications.[4] We report a case of fracture penis in a 35-year-old male who came to our hospital.

Access this article online	
Quick Response Code:	Website: www.ijcep.org
	DOI: 10.4103/2348-8093.161558

CASE REPORT

A 35-year-old male presented to our hospital with a history of pain, swelling, discoloration and detumescence of the penis. The patient gave a history of sudden change of posture while asleep with erect penis leading to severe pain and onset of swelling about 6 h back. The patient was able to pass urine without any difficulty without any blood over the urethral meatus.

Physical examination revealed a swollen, ecchymotic penis. Tenderness was present over the shaft of the penis more over the right side. Glans penis was not visible due to gross swelling of the prepuce. Penis was flaccid and deviated to the left side with discoloration of the penile shaft [Figure 1].

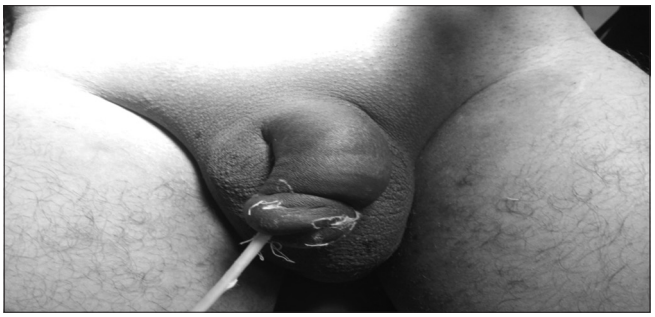

Figure 1: Swelling of the penis with detumescence and discoloration with deviation to left

Address for correspondence: Dr. Kunal Chowdhary, Department of General Surgery, MMIMSR, SCF – 3 HUDA Complex, Opposite Palika Bazar, Rohtak, Mullana, Ambala, Haryana, India. E-mail: kunalgolu.kc@gmail.com

Based on the clinical examination diagnosis of fracture penis without involvement of bulbar urethra was made and diagnosis was confirmed by magnetic resonance imaging (MRI) penis that showed a transverse tear in the tunica albuginea of the right corpora cavernosa of about 4 mm with haematoma extending between skin and tunica over the penile shaft. No involvement of the bulbar urethra was confirmed [Figure 2].

Patient was catheterized with Foley's catheter 14 Fr and routine blood investigations were done. The patient underwent immediate surgical exploration and repair of the fracture. Circumferential sub coronal degloving incision (circumcision – like) and hematoma evacuation presented a partial tear of the tunica albuginea of right sided corpus cavernosum. 4/0 prolene continuous sutures were used to repair rupture of right corpus cavernosus. Skin closed with prolene 4/0 suture [Figures 3 and 4]. In the post-operative period, patient was advised to avoid erection for 10 days and all sutures were removed on 8th day and patient was discharged in satisfactory condition. On routine follow-up till 6 months there was no pain on erection, no chordee, no erectile dysfunction.

DISCUSSION

Penile fracture is a rare urological emergency. The tunica albuginea is a structure of great tensile strength that is able to withstand rupture at pressures up to 1500 mmHg. The tunica albuginea thins markedly during erection, which when combined with abnormal bending leads to excessive intracavernosal pressure and most often a transverse laceration of the proximal shaft.[4,5] The tunica albuginea is 2 mm thick in a flaccid penis, but decreases to 0.25 mm during an erection, and a sudden increase in intracorporeal pressure due to blunt trauma during an erection could easily result in rupture.[4] Diagnosis can be clinically but in atypical presentation imaging may be required with MRI penis being the best investigation.[6] Early surgical intervention offers the best modality of treatment with sub-coronal or circumferential incision being the best described surgical approach, allowing good visualization of all three corporeal compartments and allowing exploration and repair of any concomitant urethral injury.[4-6]

Penile fracture is under reported urological emergency. The diagnosis of this clinical entity is mainly clinical but MRI penis is the investigation of choice. Early surgical treatment offers the best modality of treatment to reduce the long term complications.

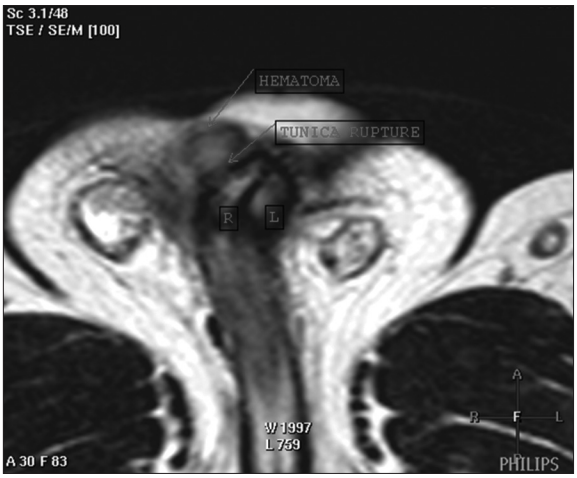

Figure 2: The magnetic resonance imaging with cavernosum defect with haematoma

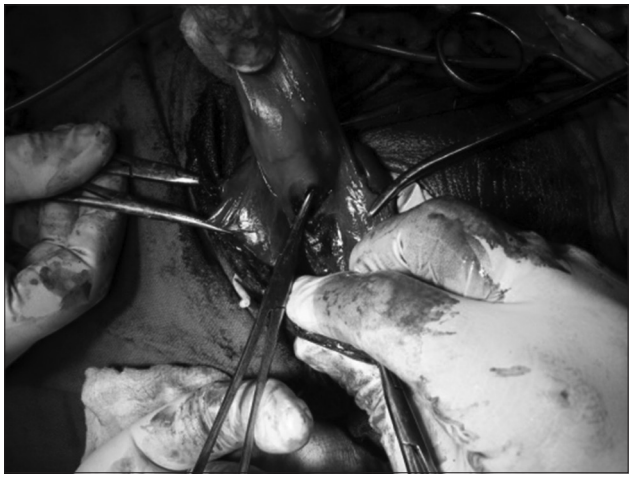

Figure 3: The defect in the right corpus cavernosum

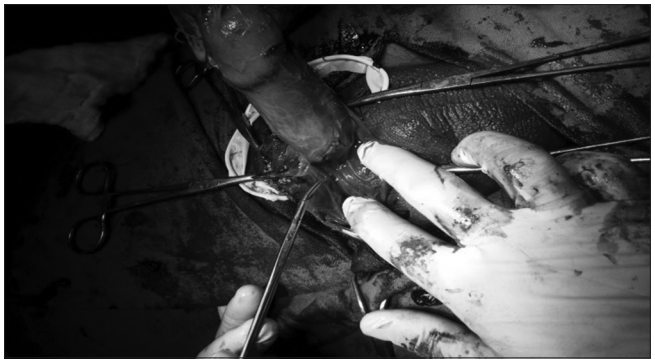

Figure 4: The sutured right corpus cavernosum

REFERENCES

1. Eke N. Fracture of the penis. Br J Surg 2001;82:555-65.
2. Zargooshi J. Penile fracture in Kermanshah, Iran: Report of 172 cases. J Urol 2000;164:364-6.
3. Dever DP, Saraf PG, Catanese RP, Feinstein MJ, Davis RS. Penile fracture: Operative management and cavernosography. Urology 1983;22:394-6.

4. Jack GS, Garraway I, Reznichek R, Rajfer J. Current treatment options for penile fractures. Rev Urol 2004;6:114-20.
5. Agarwal MM, Singh SK, Sharma DK, Ranjan P, Kumar S, Chandramohan V, *et al.* Fracture of the penis: A radiological or clinical diagnosis? A case series and literature review. Can J Urol 2009;16:4568-75.
6. Choi MH, Kim B, Ryu JA, Lee SW, Lee KS. MR imaging of acute penile fracture. Radiographics 2000;20:1397-405.

How to cite this article: Dwivedi S, Chowdhary K, Mittal A, Kumar M. Fracture penis: An interesting case report. Int J Clin Exp Physiol 2015;2:139-41.

Source of Support: Nil, **Conflict of Interest:** None declared.