

Penile Fracture With Complete Urethral Transection: A Case Report

¹Dr Shyam Charan Baskey, ¹Dr Ramchandra Besra, ¹ Dr Niranjan Mardi, ²Dr Shital Malua, ²Dr Pankaj Bodra

Senior Resident¹, Ex Senior Resident¹,
Junior Resident¹, Associate Professor²

Department of Surgery, Rajendra Institute of Medical Sciences, Ranchi, Jharkhand
India, Pin- 834009

Abstract: The penile fracture with complete urethral transection is the rare surgical emergency. 30 years male presented with retention of urine, swelling and pain of penis with immediate detumescence after sexual intercourse. Penis was swollen, echymotic and blood at the meatus. Immediate surgical exploration done and ruptured tunica albuginea and urethra repaired. Patient discharged uneventful and eventless follow up.

Key words: Penile fracture, Corpora rupture, Urethral injury

I. Introduction

The penile fracture is rare entity and its diagnosis mainly based on high level of clinical suspicion and history. Penile fracture typically occurs when the engorged penile corpora are forced to buckle and literally “pop” under the pressure of a blunt sexual trauma. Patients typically describe immediate detumescence, severe pain and swelling as a result of the injury. Prompt surgical exploration and corporal and urethral repair is the most efficacious therapy. Although a majority of cases can be diagnosed from the history and physical examination alone, radiographic studies including retrograde urethrography and corporal cavernosography can aid in the diagnosis of unusual cases.

Case report

A 30 years male came to the emergency with complaint of retention of urine, pain and swelling in penis. On history there was sexual act and engorged erect penis slipped out of vagina and buckle on pubis symphysis with pop sound immediately leading to detumescence and severe pain and swelling of penis. On examination there was swollen, echymotic penile shaft and base of scrotum. There was a blood at the meatus suspicion towards urethral injury. All other vital parameters were within normal limit. Unsuccessful urethral catheterization attempted to relieve retention of urine. Immediate X-ray pelvis done to rule out the pelvis fracture. Patient shifted to emergency operation theater for exploration of penile fracture and subsequent urethral injury. Subcoronal circumferential incision given and penile skin degloved and searched for corpora rupture and urethral injury. There were both corpora ruptured and also complete transection of penile urethra in mid shaft and then guided foley’s catheterization done after identification of proximal and distal urethra. Retention of urine relieved, corpora spongiosum opened at the injury site and urethral injury repaired along with repair of tunica albuginea with 3-0 vicryl. Wound closed, foley’s catheter remain in situ for one month and the patient discharged and follow up was uneventful.



Fig- Showing swollen an echymotic penis

Fig- Showing blood at the meatus and echymotic penis



Fig- Showing ruptured corpora and complete transection of urethra

II. Discussion

The first case of a penile fracture was described in the literature in 1924.¹ Although initially regarded as a relatively rare injury, fracture of the penis is an increasingly reported genitourinary trauma. A review by one investigator identified more than 1600 cases in the world literature, with more than half of those cases originating from Muslim countries. In the United States, the majority of cases are the result of traumatic coitus, usually from thrusting an erect penis against the symphysis pubis or perineum.³ In Japan, only 19% of cases are attributed to sexual intercourse, with the majority of cases reported as the result of masturbation and rolling over in bed onto an erect penis.⁴ A majority of the cases in Mediterranean countries are the result of patients kneading and snapping their penis during erection to achieve detumescence. In Iran, only 8% of the cases were attributed to sexual intercourse; the remaining cases were due to self-manipulation and potentially fabricated events, such as a donkey bite to the erect penis, a man falling from a mountain onto his erect penis, and a brick falling onto an erect penis.⁵ Other rare reports in the world literature include cases resulting from banging an erect penis against a toilet, masturbating into a cocktail shaker, and placing an erect penis into tight pants.^{6,7,8} Retrograde urethrography is advocated in any case of suspected penile fracture that presents with voiding difficulty, hematuria, or blood at the meatus. The incidence of urethral injury ranges from 0% to 3% in Asia and the Middle East to 20% to 38% in the United States and Europe.^{5,9,10,11,12} Although hematuria, blood at the meatus, and voiding symptoms often signal a urethral injury, the absence of these features does not exclude the possibility of a urethral injury.¹³ Evidence of bilateral corporal rupture should also prompt investigation for a potential urethral injury, because bilateral injuries have a higher rate of urethral disruption compared with unilateral fractures.^{10,14}

III. Conclusion

Penile fracture was rare entity in Indian subcontinent due to sexual intercourse which was even rare entity with complete transection of penile urethra. Although some cases of penile fracture along with urethral injury observed in Europe and United states. Immediate surgical exploration and repair is ideal modality of treatment to prevent complication.

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References

- [1]. Malis J. Zur Kausuistik der fractura penis. Arch Klin Chir. 1924; 129:651. (Ger)
- [2]. Eke N. Fracture of the penis. Br J Surg. 2002; 89:555–565. [[Pub Med](#)]
- [3]. Nicoliasen GS, Melamud A, McAninch JW. Rupture of the corpus cavernosum: surgical management. J Urol. 1983; 130:917–919. [[Pub Med](#)]
- [4]. Ishikawa T, Fujisawa M, Tamada H, et al. Fracture of the penis: nine cases with evaluation of reported cases in Japan. Int J Urol. 2003; 10:257–260. [[Pub Med](#)]
- [5]. Zargooshi J. Penile fracture in Kermanshah, Iran: report of 172 cases. J Urol. 2000;164:364–366.[[Pub Med](#)]
- [6]. Nicoliasen GS, Melamud A, McAninch JW. Rupture of the corpus cavernosum: surgical management. J Urol. 1983; 130:917–919. [[Pub Med](#)]
- [7]. Klein FA, Smith V, Miller N. Penile fracture: diagnosis and management. J Trauma. 1985;25:1090–1092.[[Pub Med](#)]
- [8]. Fetter TR, Gartman E. Traumatic rupture of penis. Case report. Am J Surg. 1936;32:371
- [9]. Ishikawa T, Fujisawa M, Tamada H, et al. Fracture of the penis: nine cases with evaluation of reported cases in Japan. Int J Urol. 2003 ;10:257–260. [[Pub Med](#)]
- [10]. Fergany AF, Angermeier KW, Montague DK. Review of Cleveland Clinic experience with penile fracture. Urology. 1999 ;54:352–355. [[Pub Med](#)]
- [11]. Asgari MA, Hosseini SY, Safarinejad MR. Penile fractures: evaluation, therapeutic approaches and long long-term results. J Urol. 1996;155:148–149. [[Pub Med](#)]
- [12]. Cendron M, Whitmore KE, Carpiniello V, et al. Traumatic rupture of the corpus cavernosum: evaluation and management. J Urol. 199 ;144:987–991. [[Pub Med](#)]
- [13]. Tsang T, Demby AM. Penile fracture with urethral injury. J Urol. 1992 ;147:466–468. [[Pub Med](#)]
- [14]. Cumming J, Jenkins J. Fracture of the corpora cavernosa and urethral rupture during sexual intercourse.Br J Urol. 1991 ;67:327. [[PubMed](#)]