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Original Research Article

Lone urethral injury following sexual intercourse- A rare case report abstract

Narendar Tiramdas[1,*], Sadhan Kumar[1], PVLN. Murthy[1], Vinay Kumar[1]

[1] *Dept. of Urology, Kamineni Institute of Medical Sciences, Narkatpally, Nalgonda, Telangana, India*

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ABSTRACT

Penile fracture after coitus present with excrusiating pain, detumescence, swelling , deformation and ecchymosis. Penile fracture associated with urethral rupture occurs only in 10% to 20% cases. Isolated corpus spongiosum and urethral injury without corpus cavernosum injury is extremely rare with five male patients described in the literature. We report a patient, who presented with typical features of penile fracture, was found to have an isolated penile urethral injury on surgical exploration and underwent primary repair.

1. Introduction

Penile fracture is defined as rupture of corpus cavernosum because of trauma to the erect penis. Penile fracture with or without urethral injury is an uncommon urological emergency.[1] It often occurs by unusual sexual intercourse or masturbation. Penile fracture usually associated with snapping sound, severe pain and rapid detumesence. Gross hematuria or voiding difficulty symptoms suggest associated urethra injury. Isolated urethral and spongiosum injury are very rare and might occur without any symptoms. It is usually diagnosed on the basis of clinical findings and surgical exploration. We report a case of isolated penile urethral injury following sexual intercourse.

2. Case Report

A 35- year-old male presented to the emergency department complaining of pain, progressive penile swelling and deformity with 6 hours duration. The penile trauma occurred while doing sexual intercourse with his wife after taking alcohol. He forcefully tried to insert penis into the vagina and hit the pubic symphysis of the wife in normal (supine) position. He felt rapid detumescence and bleeding per urethra. He presented to causality 6hrs after the incident. He passed blood stained urine mainly at the beginning of the stream, after that penile swelling was gradually increasing in size. Physical examination revealed a swollen, deformed, dusky coloured flaccid phallus with blood at the tip of the meatus (Figure 1).

The ultrasound showed breach in the corpus spongiosum with haematoma in the distal penile region. With the provisional diagnosis of penile fracture, patient agreed for emergency surgical exploration under spinal anaesthesia.

After giving prophylactic antibiotic intravenously, a subcornal circumferential incision was made and degloved upto the base of the penis. A small hematoma was found on the ventral surface of the penis. The tunica albugenia over the corpus cavernosum found to be intact. On further debridement of haematoma revealed a vertical full thickness.

Tear of size 3*2 cm noted over the ventral surface of penile urethra (Figure 2). Primary Urethral repair was done using 4-0 vicryl in two layers over 14F foleys catheter (Figure 3). The circumcisional Incision was closed with interrupted sutures. Penile dressings applied in penis elevated position. Post op period was uneventful. Patient

* *Corresponding author*.
E-mail address: narendaruro@gmail.com (N. Tiramdas).

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was discharged with foley catheter on postoperative day 8.

Fig. 1: Gross image of penile fracture

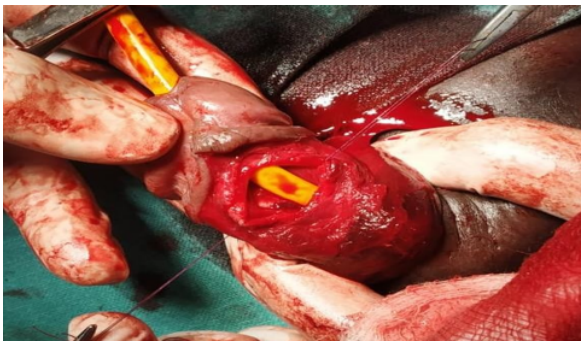

Fig. 2: Per operative image of isolated urethral defect

The foley catheter was removed after 28days, and patient was able to void to completion without difficulty. On recent follow-up after 6weeks, his erectile function was preserved without any urinary complaints.

3. Discussion

Antomically the penis is composed of three columns of tissues, dorsally two columns of corpus cavernosum and ventrally corpus spongiosum. The two columns of copus cavernosum covered by tunica albugenia. These corpus cavernosal strctures composed of sinusoids, which contributes to penile rigidity. The corpus spongiosum contains the urethra and does not contributes for penile rigidity.[2]

Penile fractures are mostly due to abnormal sexual postions like female superior position (reverse). Because of sudden blunt trauma to the penis, tear in the tunica albuginea will occur.[3] Penile fractures most commonly occurs on

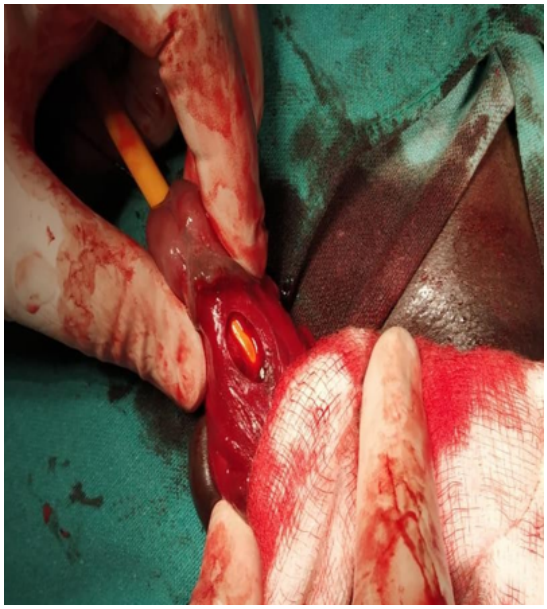

Fig. 3: Peropearative image of isolated urethral defect

the ventrolateral aspect of the penis. Usually concomitant urethral injury is greatly associated with bilateral corporal injury than unilateral corporal injury.

The clinical diagnosis of penile fracture mainly made by a “pop” sound, followed by rapid detumescence, pain, swelling and “egg-plant” penile deformity. Ulltasonography, cavernosography, magnetic resonace imaging can be used for diagnosis in equivocal cases for assessing the degree of injury.[4] Retrograde urethrography or urethroscopy can be used to demonstrate urethral injury, which has been described in the literature.[5]

Emergency surgical exploration is the definitive diagnostic procedure for penile factures. Immediate exploration yields few complications and better long-term results than conservative treatment. The main principles of repair include degloving of penile skin, evacuation of hematoma, repair of tunica albuginea tear, urethral injury repair and urethral catherisation.[5]

Usually one month absentice from sex is advised following penile fracture. Erectile dysfunction, painful erection, penile deviation, wound infection, urethral stricture and urethrocutaneous fistula formation are the usual complication following penile fractures with or without surgical repair.[6] In our case, isolated urethral injury was properly diagnosed and repaired on emergency surgical exploration. We have not observed any complications after surgery in our patient till now.

4. Conclusion

This case highlights the high index of suspicion for isolated penile urethral and corpus spongiosum injury during sexual intercourse. based on clinical findings and

following the management principles of penile fractures and urethral injury , this rare entity of isolated urethral injury can be diagnosed and managed successfully without any complications.

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6. Conflict of Interest

The authors declare they have no conflict of interest.

References

1. Eke N. Fracture of the penis. *Br J Surg*. 2002;89(5):555–65. doi:10.1046/j.1365-2168.2002.02075.x.
2. Maharaj D, Naraynsingh V. Fracture of the penis with urethral rupture. *Injury*. 1998;29:483. doi:10.1016/s0020-1383(98)00089-8.
3. Mohanpatra TP, Kumar S. Reverse coitus: mechanism of urethral injury in the male partner. *J Urol*. 1990;144:1467–8.
4. Patel A, Kotkin L. Isolated Urethral Injury After Coitus-Related Penile Trauma. *J Trauma*. 2010;68(4):E89–E90. doi:10.1097/ta.0b013e31818d0e2d.
5. Mendonca RD, Bicudo MC, Sakuramoto PK, Bezerra CA, Pompeoa AC, Wroclawski ER, et al. Isolated anterior urethral trauma in man after coitus: a case report. *Einstein*. 2009;7(4):503–5.
6. McArdle J, Wille MA, Courtney M. Isolated Spongy Urethral Rupture from Abrupt Coital Distractive Force Brian . *Hollowell J Radiol Case Rep*. 2017;11(2):23–7.

Author biography

Narendar Tiramdas, Assistant Professor

Sadhan Kumar, Post Graduate

PVLN. Murthy, Professor

Vinay Kumar, Assistant Professor

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