

Penile Fracture with isolated corpus cavernosum injury : A Case Report and Review of Indian Literature.

Abstract:

Introduction

Penile fracture is an uncommon urological emergency caused by rupture of the tunica albuginea of the corpus cavernosum, most often during sexual intercourse¹. Indian studies have shown that early diagnosis and prompt surgical repair significantly reduce long-term complications such as erectile dysfunction and penile curvature^{2,6}. We report a case of a 34-year-old male who sustained a penile fracture during intercourse and was successfully managed with early surgical repair, resulting in a favorable functional outcome.

Penile fracture refers to the traumatic disruption of the tunica albuginea of the corpus cavernosum, typically occurring when the penis is erect¹. Although rare, it is a well-recognized urological emergency in Indian surgical practice². The most frequently reported mechanism is blunt trauma during sexual intercourse, particularly when the erect penis slips out of the vagina and strikes the perineum or pubic symphysis^{3,4}.

Patients classically present with an audible cracking or popping sound, sudden detumescence, severe penile pain, and rapidly developing swelling, producing the characteristic “eggplant deformity”⁴. Earlier Indian studies reported conservative management; however, multiple contemporary Indian series have demonstrated that delayed or non-operative treatment is associated with higher rates of erectile dysfunction, penile curvature, painful erections, and fibrotic plaque formation^{5,6}. Consequently, early surgical exploration and repair is now considered the standard of care^{6,7}.

Keywords : Penile fracture; Tunica albuginea; Eggplant deformity; Surgical repair; Urological emergency .

Case Presentation

Patient Information

A 34-year-old male presented to the emergency department with acute penile pain and swelling following trauma sustained during sexual intercourse. He reported a sudden popping sound followed by immediate detumescence and severe pain. There was no history of hematuria, dysuria, or urinary retention.

Clinical Findings

Physical examination revealed diffuse penile swelling with ecchymosis and deviation to the left, consistent with the classical eggplant deformity described in earlier studies⁴. No blood was noted at the urethral meatus, and the patient was able to void spontaneously.

Diagnostic Assessment

Although the diagnosis of penile fracture is primarily clinical¹, penile ultrasonography was performed to localize the defect. Ultrasonography demonstrated a focal discontinuity of the tunica albuginea over the right corpus cavernosum with an adjacent hematoma, similar to findings reported in Indian radiological studies⁸. No features suggestive of urethral injury were identified.

Diagnosis

Penile fracture involving the right corpus cavernosum without associated urethral injury.

Therapeutic Intervention

Surgical Management

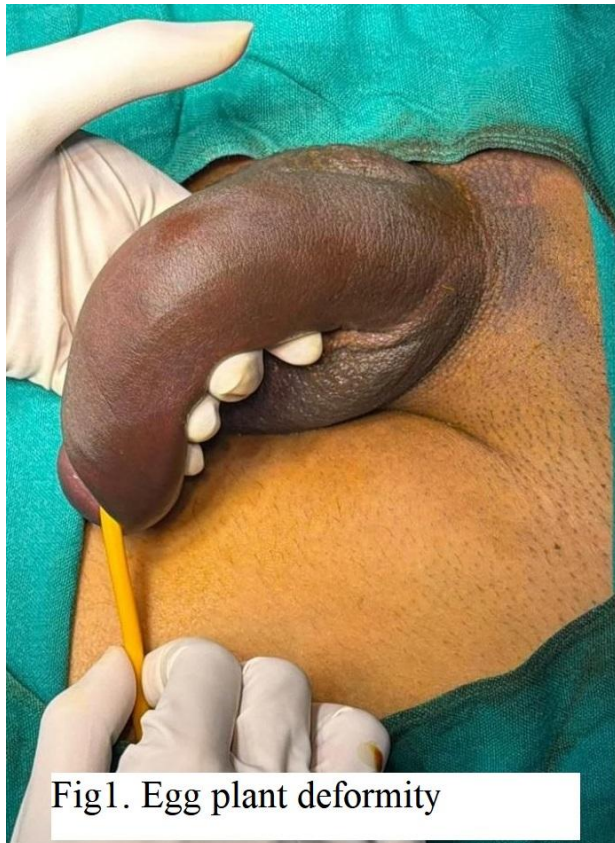
Emergency surgical exploration was performed under spinal anesthesia. A subcoronal circumferential degloving incision was used, providing excellent exposure as recommended in several Indian surgical series^{4,6}. A 1 × 1 cm tear in the tunica albuginea of the right corpus cavernosum at the mid-shaft was identified. The hematoma was evacuated, and the defect was repaired using interrupted 3-0 absorbable sutures. Careful inspection confirmed the absence of urethral injury.

Postoperative Care

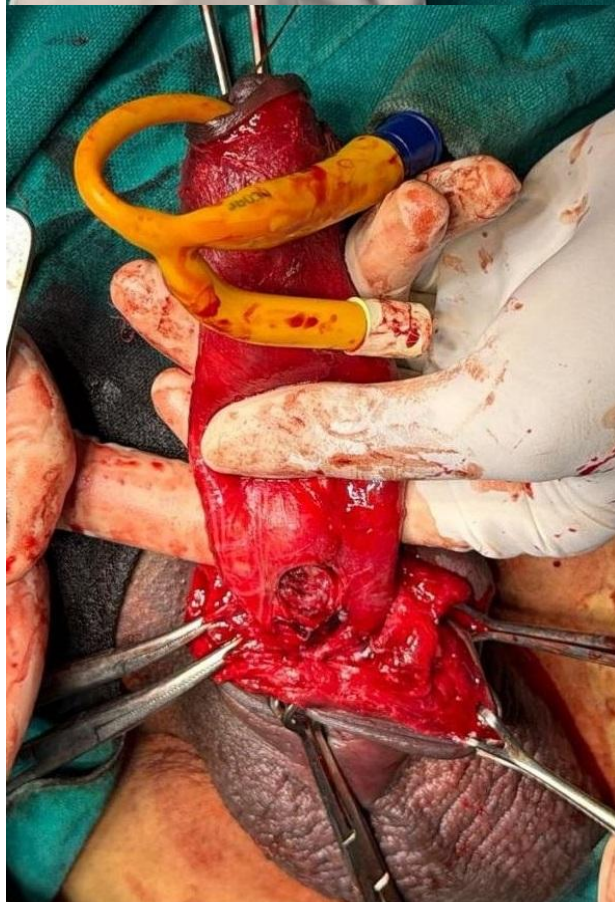
Postoperatively, the patient received broad-spectrum antibiotics, analgesics, and anti-inflammatory medications, consistent with postoperative protocols described in Indian studies^{6,7}.

Outcome and Follow-Up

The postoperative course was uneventful, and the patient was discharged on postoperative day three. At six-week follow-up, he reported normal erections without pain, curvature, or voiding difficulty, consistent with outcomes reported after early surgical repair in Indian literature^{6,10}.



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Fig 3. Picture showing repair of the defect

Discussion

Penile fracture remains an uncommon but well-documented emergency in Indian urological practice^{2,3}. Early surgical intervention has consistently been shown to produce superior functional outcomes compared to conservative management^{6,7}. Imaging modalities such as ultrasonography are useful adjuncts but should not delay operative management when clinical findings are classical^{1,8}.

Associated urethral injury has been reported in approximately 10–20% of cases, particularly in patients presenting with hematuria or blood at the meatus^{3,9}. In the present case, the absence of urinary symptoms and intraoperative findings confirmed an isolated corporal injury.

Indian studies have demonstrated that prompt surgical repair significantly reduces complications such as erectile dysfunction, penile curvature, and painful erections^{6,7,10}, reinforcing the importance of early diagnosis and management.

Conclusion

Penile fracture is a urological emergency that requires a high index of clinical suspicion¹. Early surgical exploration and repair result in excellent functional and

cosmetic outcomes while minimizing long-term complications^{2,6}. Increased awareness among clinicians is essential for timely diagnosis and optimal management.

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