ORIGINAL RESEARCH PAPER

Surgery

TRAUMATIC RUPTURE OF TUNICA ALBUGINEA: A RARE CASE OF PENILE FRACTURE WITH SUCCESSFUL EARLY SURGICAL MANAGEMENT

KEY WORDS: Penile fracture, Tunica albuginea, Cavernosal rupture, Surgical repair, Urological emergency

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ABSTRACT

Background: Penile fracture is an uncommon yet clinically significant urological emergency caused by rupture of the tunica albuginea due to a sudden rise in intracavernosal pressure during erection [3]. Delay in management may result in long-term functional impairment. **Case:** A 28-year-old male presented with classical symptoms following sexual intercourse, including a snapping sound, acute pain, and immediate detumescence [5]. A prompt clinical diagnosis was established, and immediate surgical exploration confirmed a tunical tear, which was successfully repaired. **Conclusion:** Early surgical intervention remains the gold standard, ensuring preservation of erectile function and prevention of complications [4,6].

INTRODUCTION

Penile fracture is defined as traumatic disruption of the tunica albuginea of the corpus cavernosum in an erect penis [3]. During erection, the tunica thins significantly, rendering it highly vulnerable to rupture under abnormal bending forces. Patients typically present with a characteristic "snap" followed by pain, immediate detumescence, and progressive swelling with deformity often referred to as the "eggplant deformity" [5].

Early surgical intervention has been consistently shown to reduce complications such as erectile dysfunction, penile curvature, and fibrosis, thereby preserving both anatomical and functional outcomes [4,6].

CASE PRESENTATION

A 28-year-old previously healthy male presented with acute penile pain, swelling, and immediate loss of erection following sexual intercourse. He reported hearing a snapping sound when the injury occurred [5].

On examination, the penis was swollen, ecchymotic, and deviated. There was no blood at the urethral meatus, no hematuria, and no urinary complaints. The patient was hemodynamically stable.

INVESTIGATIONS

Diagnosis was established clinically based on classical presentation [3,4]. Routine biochemical and hematological tests were within normal ranges. Imaging was not performed.

TREATMENT

Emergency surgical exploration revealed a 2 cm inferolateral tear in the tunica albuginea with hematoma. Hematoma evacuation and repair using prolene sutures was performed [1] (Figure 1).

INTRA OPERATIVE PROCEDURE

- A 2 cm defect in the inferolateral tunica albuginea with hematoma (Figure 1).
- Hematoma evacuated and defect repaired using prolene sutures [1].

OUTCOME AND FOLLOW-UP

Uneventful recovery. Discharged day 3. No complications [2,5].

Figure 1: Intraoperative image demonstrating defect in tunica albuginea with surrounding hematoma

DISCUSSION

Penile fracture requires prompt surgical intervention [3]. Early repair improves outcomes and reduces complications [4,6].

CONCLUSION

Early diagnosis and surgical repair ensure excellent outcomes [4,6].

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