



ORIGINAL RESEARCH PAPER

Surgery

TRAUMATIC RUPTURE OF THE TUNICA ALBUGINEA: A COMPREHENSIVE CASE STUDY AND SURGICAL INTERVENTION FOR PENILE FRACTURE

KEY WORDS:

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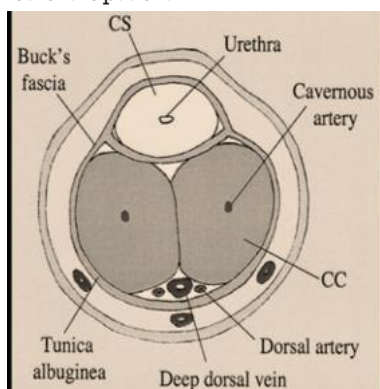
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INTRODUCTION

- ❖ Penile fracture, a rare urogenital injury often resulting from sexual activity, involves a sudden increase in cavernosal pressure, causing tunica albuginea rupture.
- ❖ Clinical features include a distinct history of trauma, immediate pain, and visible deformity.
- ❖ Surgical repair is the gold standard, aiming to promptly evacuate hematoma, precisely repair the tunica albuginea, restore anatomy, and mitigate complications associated with conservative strategies.
- ❖ Clinical features involve a distinctive history of blunt trauma to an erect penis with an audible "snap" or "pop," immediate pain, and rapid loss of erection.
- ❖ The principal surgical goals include expeditious hematoma evacuation and precise repair of the ruptured tunica albuginea
- ❖ This case report underscores the critical importance of identification, precise diagnostic procedures, and timely implementation of surgical interventions to maximize outcomes for the patient.



AIM & OBJECTIVE

To evaluate and enhance the management of penile fractures through an integrated approach involving clinical examination and strategic imaging techniques.

Clinical Presentation: A 28-year-old male presented with acute penile pain and swelling, attributing the symptoms to an episode of sexual intercourse, marked by the loss of tumescence and an audible snapping sound.

Physical Examination: Notable findings during physical examination included substantial swelling, ecchymosis, and evident penile deformity, consistent with the diagnosis of penile fracture. Stable vital signs and the absence of urethral bleeding or voiding difficulties indicated an intact urethra.

Diagnosis Confirmation: Given the characteristic clinical presentation, a swift diagnosis of penile fracture was made, prompting the immediate admission of the patient to the urology ward.

Initial Interventions: Upon admission, the patient underwent 16 French Foley catheterization for urine drainage and continuous monitoring. Conservative management involving analgesics and antibiotics was initiated to address the acute symptoms.

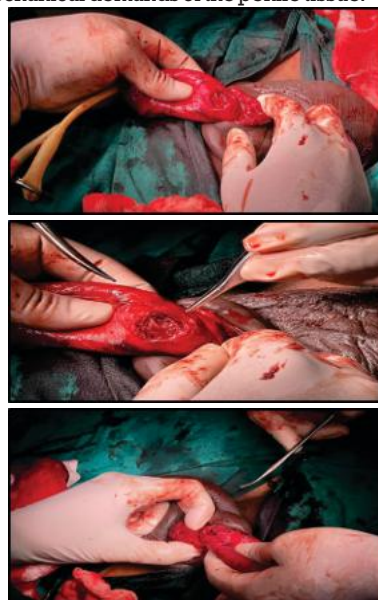
Preoperative Investigations: Comprehensive preoperative investigations, including blood count, renal function, urine

analysis, and serology, returned normal results. The patient's medical and surgical history revealed no significant abnormalities.



Intra Operative Procedure

- ❖ During surgical exploration in the operating room, a meticulous examination revealed a 2 cm defect in the inferolateral tunica albuginea accompanied by a hematoma.
- ❖ To address the penile fracture, the surgeon employed prolene sutures, a non-absorbable and robust material, ensuring precise alignment and closure of the tunica albuginea defect.
- ❖ The procedure involved careful incision and exposure, identification of the rupture, and evacuation of the associated hematoma.
- ❖ The use of prolene sutures played a pivotal role in achieving a secure closure that can withstand the biomechanical demands of the penile tissue.



Post-Operative Observation

Postoperative Care: The Foley catheter was removed on the second postoperative day, and the patient experienced an uneventful recovery, leading to discharge on the third postoperative day.

Prescribed Medications: Post-discharge, the patient received a prescription for oral antibiotics, analgesics, and sedatives, forming an integral part of the postoperative care plan.

Detailed Postoperative Instructions: Alongside medications, the patient received detailed postoperative instructions, emphasizing strict adherence to the prescribed regimen and the avoidance of sexual activity for approximately three months.

CONCLUSION & REFERENCES

CONCLUSION

- Effective management of the 28-year-old male with penile fracture emphasizes prompt diagnosis, comprehensive surgical intervention, and meticulous postoperative care.
- The successful outcomes underscore the significance of a well-coordinated approach in addressing this urological emergency, emphasizing the importance of early intervention.
- Patient adherence to postoperative guidelines plays a crucial role in optimizing recovery and minimizing complications.
- The multidisciplinary collaboration among healthcare professionals contributes to the success of the surgical intervention.
- Overall, this case highlights the importance of timely, coordinated efforts for favorable outcomes in penile fracture cases.

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