

**Case Report**

# Penile Fracture: The “Cracking” Sound and Intra-operative Tunica Albuginea Repair

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## Abstract

Penile fracture is a rare urological emergency typically characterized by an audible “cracking” sound, immediate detumescence, and rapid penile swelling following trauma to an erect penis. We present clinical and intra-operative images of a 37-year-old man with a proximal tunica albuginea tear confirmed at urgent exploration and repaired with absorbable sutures. Early surgical exploration with hematoma evacuation and primary repair remains the preferred approach to reduce long-term complications such as penile curvature and erectile dysfunction.

## Introduction

Penile fracture is an uncommon urological emergency caused by rupture of the tunica albuginea of the corpora cavernosa, most often during sexual intercourse [1]. Population-based emergency department data suggest a rare incidence [2]. The injury typically results from sudden bending of an erect penis with an audible “cracking” sound, immediate detumescence, and rapid swelling/deformity [1].

## Case report

A 37-year-old man presented with sudden penile pain and rapid swelling that occurred during sexual intercourse, immediately preceded by an audible “cracking” sound and followed by abrupt detumescence. On examination, there was marked penile shaft swelling with mild angulation/deviation, highly suggestive of penile fracture (Figure A). There was no hematuria.

Penile ultrasonography demonstrated a penile hematoma. Although imaging can be helpful in selected cases, the combination of the typical mechanism, the reported cracking sound with immediate detumescence, and the characteristic clinical appearance supported the diagnosis on clinical grounds, and urgent surgical exploration was indicated. The patient was taken to the operating room and explored via a

circumferential subcoronal incision with complete penile degloving (Figure B). After evacuation of the hematoma, a tear of the tunica albuginea was identified at the penile root (proximal corpora cavernosa) and repaired with three separate interrupted absorbable sutures (3-0 Vicryl) (Figure C). No urethral injury was identified.

Postoperative recovery was uneventful. At 1-month follow-up, the surgical site demonstrated satisfactory healing (Figure D). After discharge, the patient was prescribed erection-suppressing medical therapy to minimize postoperative erections during the early healing period.



**Figure A:** Preoperative photograph showing marked penile swelling with mild angulation/deviation following sexual intercourse, consistent with penile fracture.



**Figure B:** Intra-operative photograph after circumferential subcoronal incision and complete penile degloving.



**Figure C:** After hematoma evacuation, the proximal corporal tunica albuginea tear at the penile root is identified (blue arrow) before repair with interrupted 3-0 Vicryl sutures.



**Figure D:** Postoperative appearance at 1 month showing satisfactory healing.

## Discussion

Penile fracture most commonly results from sudden bending (“buckling”) of an erect penis, leading to rupture of the tunica albuginea and rapid hematoma formation. When the classic history is present - particularly an audible “cracking” sound followed by immediate detumescence with rapid swelling/deformity - the diagnosis is often

clinical, and imaging should not delay management in typical presentations [1,3]. Ultrasonography may be useful in selected or equivocal cases to support diagnosis and aid surgical planning [3].

Early surgical exploration with hematoma evacuation and primary tunica albuginea repair remains the preferred management strategy and is associated with lower rates of long-term complications such as penile curvature and erectile dysfunction compared with conservative management [1,3-5]. Although the early outcome was favorable in this patient, standard follow-up objectives include assessment for penile curvature and erectile function; accordingly, follow-up is planned beyond the 1-month visit (e.g., at 6–8 weeks and 3–6 months) to evaluate functional recovery and late sequelae [1,3-5].

## Conclusion

This clinical image highlights the classic presentation of penile fracture and demonstrates intra-operative identification and primary repair of a proximal tunica albuginea tear. Early surgical exploration with hematoma evacuation and tunica albuginea repair remains the preferred approach to minimize long-term complications such as penile curvature and erectile dysfunction [1,3-5].

**Patient consent:** Written informed consent for publication of the clinical details and images was obtained from the patient.

## References

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