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Case Report

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Penile fracture rare urological emergency

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ABSTRACT

Penile fracture is a rare complication which occurs at the time of sexual intercourse. It is an emergency condition and usually diagnosis is made by clinical examination. Immediate surgical repair is done to avoid physiological and psychological consequences. Here we present one case of penile fracture which occurred during sexual intercourse and was immediately repaired with no postoperative complications.

Keywords: Penile fracture, Corpus cavernosum, Urethra

INTRODUCTION

Penile fracture was first reported in 1924. Fracture of the penis is a relatively uncommon form of urologic trauma. The true incidence of penile fracture is not known because it is under reported as many patients fail to seek medical help owing to various sociocultural inhibitions. In literature less than 1500 cases has been reported from 1935 to 2005. It is a disruption of the tunica albuginea of one or both corpus cavernosum due to blunt trauma to the erect penis. Penile fracture is an emergency condition and required emergent diagnosis and immediate surgical intervention to prevent physiological and psychological consequences.

CASE REPORT

A 40 year old man presented with pain and swelling in the penis for last 12 hours after sexual intercourse. According to the patient heard a sudden crackling sound at the time of sexual intercourse which was followed by acute pain and rapid detumescence, penile swelling and discoloration and hematuria. He was catheterised by a local private practitioner. He presented after 12 hours in emergency department. On clinical examination, penis was ecchymosed, deformed and swollen with typical eggplant deformity (Figure 1) that is highly diagnostic of penile fracture. Corporal defect was not palpable due to

hematoma and swelling. On examination he was haemodynamically stable with normal vital signs. Penile ultrasound and Doppler confirmed the diagnosis of penile fracture. The patient underwent immediate surgical exploration and repair of the fracture.

Subcoronal incision of penis was given; penis was completely degloved of skin. After hematoma evacuation a partial tear of the tunica albuginea of right sided corpus cavernosum and partial tear of urethra is present (Figure 2). 2/0 non-absorbable interrupted sutures were used to repair of tear in corpus cavernosum. An 18-F Foley catheter was indwelled in the bladder. The urethra was repaired in one layer, tension free sutures with 3/0 vicryl interrupted sutures. Sterile dressing was done. The patient recovered well in hospital and was discharged on postoperative day 6 on antibiotics with a Foley catheter in situ. The patient was advised to abstain from intercourse for at least 4 weeks. Foleys catheter was removed after 3 weeks. In the follow up patient, had no complaint and no complication occurred.

DISCUSSION

Penile fracture is caused by sudden and abrupt bending of tense and thinning of tunica albugenia from 2mm to 0.5mm in an erectile penis, this reduction in thickness and associated loss of mobility make the tunica albuginea of the erect penis vulnerable to fracture and the most common cause is during sexual intercourse and this is most commonly seen in position when woman-on-top, resulting in impact against the female pelvis or perineum and bending laterally.^{3,4} The other rare reported modes of injury include penis rolling over one's own body during nocturnal erection, direct blow on an erect penis, forced bending or hastily removing or applying clothing with the penis erect, going exercise which is a type of martial art.^{4,5} Penile fracture is associated with partial urethral tear in about 38% and complete disruption of urethra is rare complication.⁶

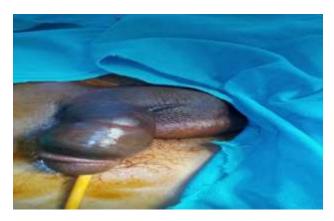


Figure 1: Eggplant deformity after penile fracture.



Figure 2: Tear in urethra and corpus cavernosum.

Patients present with a classical history of a popping or cracking sound followed by immediate detumescence, pain, swelling, hematoma and deformity, haematuria and urinary retention⁷ Diagnosis is purely made on history and local examination but in rare cases penile USG, retrograde urethrogram in suspected case of urethral injury and MRI may be needed.

In 1936 Fetter and Gartmann⁸ was the first person who described the surgical repair of tunica albugenia and surgery reduces the complication of fracture and it is now the gold standard for treatment of penile fractures today. Primary repair with non-absorbable sutures with buried knots inside is preferable due to case reports of refracture of penis repaired with absorbable sutures.⁹ Cavernosal patch graft may be used for large tears.

The complication rate for conservative management was reported to be about 30%, this included fibrous tissue formation with deviation of the penis during erection, prolonged hospital stay and impotence compared with less than 10% for immediate surgical repair. ¹⁰ Thus early exploration with evacuation of hematoma followed by repair of cavernosal tear should be done in suspected penile fracture cases. Urethra injury should be evaluated and managed simultaneously.

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