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CASE REPORT ON PENILE FRACTURE: AN UNCOMMON PRESENTATION

General Surgery
Dr. Vinay Bharwad
Dr. Aastha Bharwad
Dr. Virinchi Dabbir

ABSTRACT

Penile fracture is an unusual, and underreported condition caused by the traumatic rupture of tunica albuginea when penis is erect.
We report a case of 41 year old man who presented 24 hours after sustaining blunt trauma to penis during sexual intercourse. Patient presented with pain and swelling over penis. Prompt surgical exploration was done and intraoperative rupture of unilateral tunica albuginea was found. Postoperatively, patient had a favourable recovery, and presented with normal erectile and voiding function 1 month after surgery.
Emergency surgery can preserve function of the penis and avoid physical and psychological disabilities.

KEYWORDS

Penile fracture, tunica albuginea

INTRODUCTION:

Penile fracture is the rupture of tunica albuginea with extravasation of blood within the penis most commonly caused due to injury to the erect penis. It is an unusual, and underreported but not a rare condition. [1] Tunica albuginea is a rubbery sheath of tissue below the skin that allows the penis to increase in width and length to produce a firm erection. [2] In the flaccid state tunica albuginea is up to 2.4 mm thick; during erection it becomes as thin as 0.25 to 0.5 mm.[3] Bitsch et al. and De Rose et al. proposed that an intracorporal pressure of 1500 mmHg or more during erection can tear the tunica albuginea.

Patient usually complains of a "loud crackling sound" accompanied by loss of erection, pain, bruising and swelling. [4] Early surgical management is the treatment of choice and with excellent prognosis. [5]

We report a case of 41 year old man with fracture penis who came to our hospital.

Case Report: A 41 year old male presented to the emergency department of our hospital 24 hours after penile trauma during sexual intercourse. Patient reported hearing a popping sound followed by intense pain and swelling over the penis.

Physical examination showed a swollen, deformed and ecchymotic penis. Penis was flaccid and deviated to the right side. [FIGURE 1] There was no urethral bleeding or voiding difficulty.

No previous sexual disorder or history of similar incident was elicited. Patient was catheterized with Foleys catheter no. 14 and routine blood investigations (CBC, RFT, and Urine R/M) were done which were within normal limits.

Immediate surgical exploration and repair of fracture was done. Sub coronal circumferential degloving incision was kept. [FIGURE 2] Hematoma was evacuated and a partial tear of the tunica albuginea of left corpora cavernosum was found. [FIGURE 3] 2/0 interrupted vicryl suture was used to repair the corpora cavernosum.[FIGURE 4] Redundant foreskin was excised and reapproximation achieved with 3/0 vicryl suture in simple interrupted manner.

Postoperatively, patient was discharged on the 7th day. On follow up after 3 weeks, patient had no pain, erectile dysfunction or voiding difficulties.

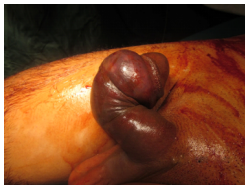

FIGURE 1: Swelling of the penis with detumescence and discoloration with deviation to right

FIGURE 2: Subcoronal circumferential degloving incision

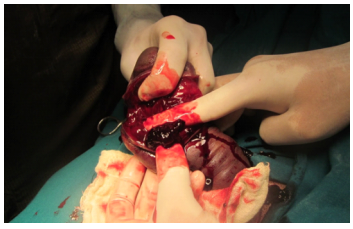

FIGURE 3: Defect with hematoma in left corpus cavernosum

FIGURE 4: Suturing of left corpus cavernosum with 2/0 vicryl

FIGURE 5: 7TH post-op day

DISCUSSION:

The penis is composed of three tubular structures, two dorsolateral corpora cavernosa and one ventral corpus spongiosum. The corpora cavernosa has an outer covering of tunica albuginea, which is relatively inelastic. The tunica albuginea has a trabecular structurewith

a network of sinusoidal spaces lined by endothelium within which the blood pools during erection. [6]

Penile fracture is an underreported condition which can occur due to vigorous sexual intercourse or masturbation. [7] Urethral rupture is associated with up to 38% of penile fractures. [6]

The diagnosis is mainly clinical, with USG being the most common investigation done for confirmation and MRI being the investigation of choice. In our case, radiological investigations were not done due to lack of resources.

Immediate surgical repair with complete degloving of penile shaft, evacuation of hematoma and repair of corpora cavernosa is the treatment of choice. In our case, early surgical treatment was done with a favourable outcome on follow up. [8]

Conclusion: Penile fracture is an uncommon urological emergency, which requires emergency surgical treatment with favourable outcome.

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