Journal Homepage: -www.journalijar.com
INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)
Article DOI:10.21474/IJAR01/ 9313
DOI URL: http://dx.doi.org/10.21474/IJAR01/9313
ISSN NO. 2320-5407

RESEARCH ARTICLE

A RARE PRESENTATION OF PENILE TRAUMA.

Dr. Neel Patel.
Senior Resident,Department of Urology,Aurangabad.

Manuscript Info

Manuscript History
Received: 15 April 2019
Final Accepted: 17 May 2019
Published: June 2019

Key words:-
Penile fracture, Urethral injury, eggplant deformity.

Abstract

Penile fracture is a rupture of the tunic albugenia of corpus cavernosum that occurs when the penis is erect. The fracture can also involve the corpus spongiosum and urethra.
We report a case of a 35 year old man who presented with acute penile pain, penile swelling with clicking sound during intercourse and the inability to pass urine. On exploration we found bilateral partial rupture of the corpus cavernosum with complete urethral and corpus spongiosum disruption. At 1 year follow up patient was having normal erection and voiding function.
Penile fracture's emergent management preserves erectile and voiding function.

Introduction:-

Fracture of the penis uncommon urologic trauma. It is a disruption of the tunica albuginea of one or both corpus cavernosum due to blunt trauma to the erect penis.[1]

It is accompanied by partial or complete urethral rupture or by injury of the dorsal nerve and vessels.[2] Tunica albuginea is one of the strongest fascia in the human body. Tunica albuginea stretches and thins significantly during erection: in the flaccid state it is up to 2.4 mm thick; during erection it becomes as thin as 0.25 to 0.5 mm. 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. [3,4] The classic presentation of penile fracture is a sudden cracking sound on erect penis followed by pain, rapid detumescence, swelling and discoloration of the penis with or without voiding problems.[5]

Case Report:

A 35 year old male presented in emergency department with history of sudden clicking sound on erect penis followed by rapid detumescence while having anal intercourse with wife 12 hours ago. He was having acute penile pain, discoloration and swelling of penile shaft, inability to pass urine. Trying to urinate aggravated pain and he could not pass urine. He was also having scrotal swelling.

On physical examination, swelling and ecchymosis on ventral aspect causing acute dorsal angulation (Eggplant deformity) was present and blood at meatus present. Bladder was palpable.

Corresponding Author:-Dr. Neel Patel.
Address:-Senior Resident,Department of Urology,Aurangabad.

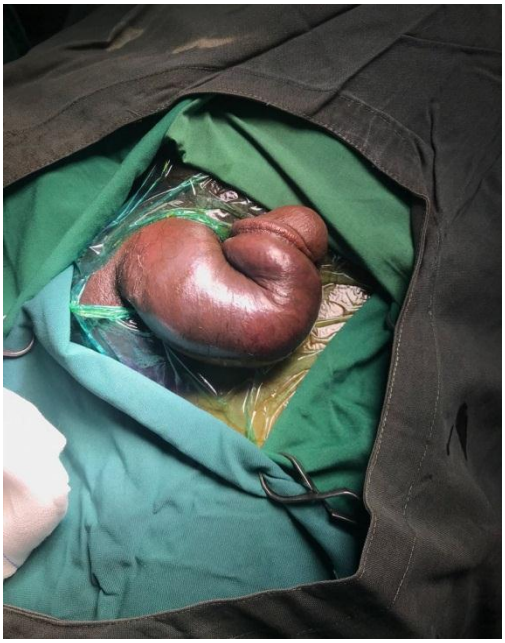

Figure 1:-Eggplant deformity

His routine investigations CBC, RFT, Electrolytes, Serology done and were within normal limits. Ultrasound of penis done showing tear in tunica albuginea in ventral aspect.

Patient was taken for immediate surgical exploration. A circumcoronal incision given. Hematoma was evacuated. Foley's catheter introduced through meatus could be seen coming out from urethral transection site.

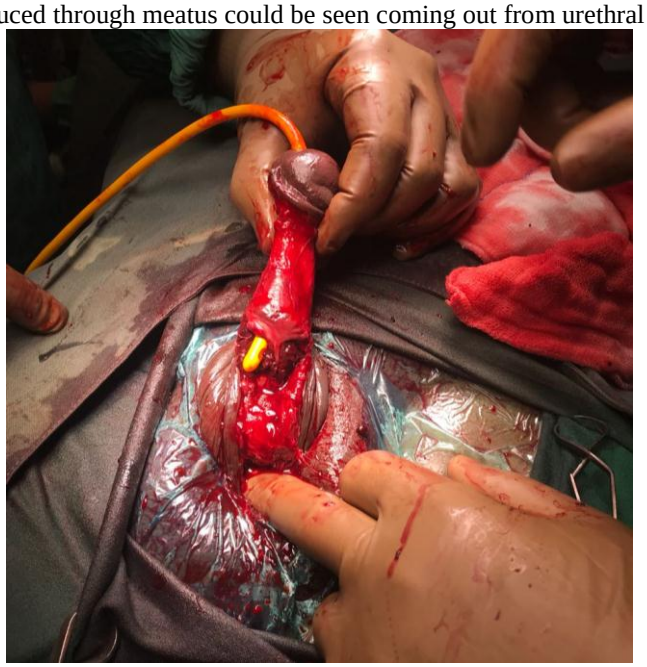

Figure 2:-Site of complete urethral transaction.

Tear involving tunica albuginea of both corpora cavernosa with complete urethral transaction was present. 4/0 vicryl interrupted sutures were used to repair rupture of both corpora cavernosa. After freshening urethral edges and mobilization of proximal and distal corpus spongiosum,Urethral ends were spatulated and urethra was anastomosed in one layer over foley's catheter in tension free manner with 5/0 PDS interrupted sutures.

Figure 3:-Urethra repaired over a foley's catheter

Artificial erection done by injecting saline through cavernosa and confirming no leak from sutured site as well as other site in corpora. Foley's catheter no 14 placed as SPC.

Patient was given IV antibiotics and regular dressing done postoperatively. On 14th day supra pubic catheter was clamped and perurethral catheter was removed. Patient voided urine with good uroflow and at 1 year follow up he was having normal uroflow and normal erectile function.

Discussion:-

During erection penis becomes a vulnerable organ because thick tunica albuginea becomes thin and fracturable, which when combined with abnormal bending leads to excessive intracavernosal pressure and laceration of the penile shaft. Most common etiology of penile fracture in western world is vigorous sexual intercourse during which high velocity trauma can cause penile fracture and urethral rupture in 38% of cases.[6] In Eastern world majority cases are associated with snapping and kneading of penis during erection to achieve detumescence. So urethra is rarely involved in such low energy trauma. Zargooshi reported urethral rupture in 3% of penile trauma.[7] Urethral rupture in such cases is usually partial and it is rarely a complete injury.

Conservative management of penile fracture like old applications, pressure dressings, catheterization, anti-inflammatory drugs, antibiotics and erection suppressing drugs is now replaced with emergent exploration and repair.

Surgical repair of penile fracture was first described by Fetter and Gartman in 1936.[8]

We presented a case of a 35 year old man who sustained penile fracture during anal intercourse. Emergency surgical exploration and repair of bilateral partial rupture of the corpus cavernosum with complete urethral transaction. At one year follow up the patient was having normal erection and voiding function.

Conclusion:-

Emergency repair of penile fracture preserves sexual and voiding function.

Reference:-

1. Rosenstein D, McAninch JW: Urologic emergencies. Med Clin North Am. 2004, 88 (2): 495-518. 10.1016/S0025-7125(03)00190-1.

2. Haas CA, Brown SL, Spirnak JP: Penile fracture and testicular rupture. World J Urol. 1999, 17 (2): 101-6. 10.1007/s003450050114.
3. Bitsch M, Kromann-Andersen B, Schou J, Sjontoft E: The elasticity and the tensile strength of tunica albuginea of the corpora cavernosa. J Urol. 1990, 143 (3): 642-5
4. De Rose AF, Giglio M, Carmignani G: Traumatic rupture of the corpora cavernosa: new physiopathologic acquisitions. Urology. 2001, 57 (2): 319-22. 10.1016/S0090-4295(00)00926-2.
5. Jordan GH, Gilbert DA: Male genital trauma. Clin Plast Surg. 1988, 15 (3): 431-42.
6. Eke N: Fracture of the penis. Br J Surg. 2002, 89 (5): 555-65. 10.1046/j.1365-2168.2002.02075.x.
7. Zargooshi J: Penile fracture in Kermanshah, Iran: report of 172 cases. J Urol. 2000, 164 (2): 364-6. 10.1016/S0022-5347(05)67361-2.
8. Fetter TR, Gartman E: Traumatic rupture of penis. Case report. Am J Surg. 1936, 32: 371-2. 10.1016/S0002-9610(36)90167-8.