Penile Fracture

Pages with reference to book, From 132 To 133

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Fracture of the penis or rupture of corpora cavernosum is a rare urological emergency and so far only 180 cases are reported in the literature[1]. Early reports[2] suggest conservative therapy as the choice of treatment while recent ones[3] emphasize on immediate surgical repair to prevent late sequel of injury. We report a case where surgical repair of penile fracture was done.

Case Report

A 38 years old man presented to emergency room with acute onset of swelling of the penile shaft and moderate pain because of iqjury sustained two hours previously. Acconling to the patient, he on intention forcibly bent the penis while having early morning erection, He refused to give any relation with sexual activity. He claimed to have heard a distinct cracking sound at that time, but denied pain. Later on, while micturatinghe noticed gross swelling of penis and then started to have mild to moderate pain. He did not have any urinaiy problem.

Onphysical examination, the patient was not in distress and his vital signs were stable. The penis was grossly swollen with marked ecchymoses of the dorsal shaft (Figure 1).

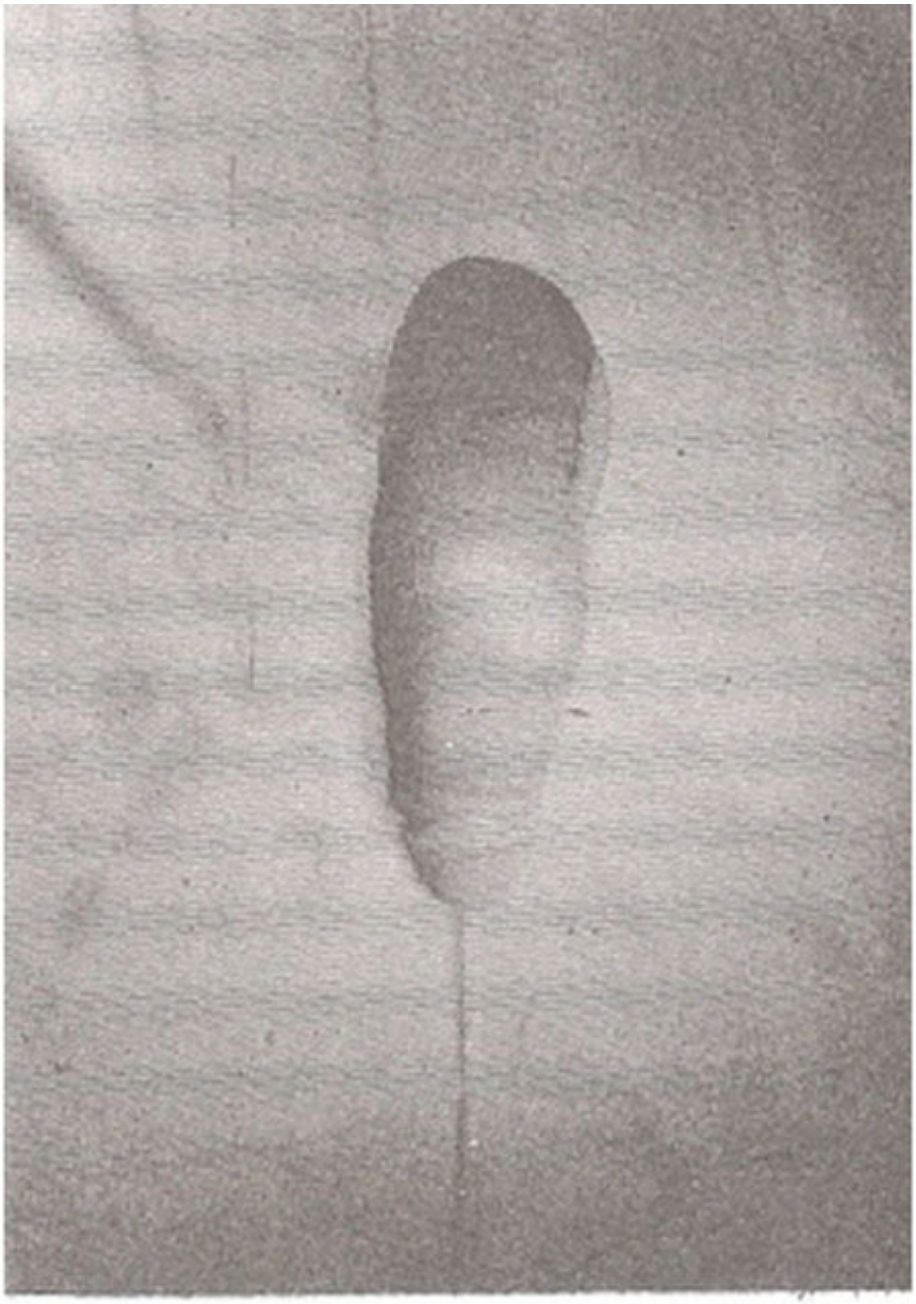

Figure 1. Pre-op. showing swelling and ecchymosis on the dorsolateral aspect of penis.

There was no blood at the external urethral meatus. Bladder was not He was admitted and taken to the theater on the same day. Under general anaesthesia he was initially catheterized with a Foley 16F catheter followed by a circumcoronal incision given at the previous scarof circumcision. Penile skin was degloved upto the base. There was gross haematoma of the penile shaft mainly present on the left dorsolateral aspect. A 2 cm transverse tear in the tunica albuginea of the left corpora cavernosum was discovered in the proximal one thud of the penile shaft (Figure 2).

Figure 2. Per-op. showing transverse tear in tunical albuginea.

The erectile tissue was visible with intermittent pouring out of blood. A tourniquet was applied atthebase ofthepems to achieve a bloodless field. The Bucks fascia was incised vertically taking care to preserve the neurovascular bundle and the tear was adequately exposed. Primary repair of the tunica albugenia was performed with a continuous vicryl 3/0 suture on a cutting needle. The tourniquet was released and having satisfied of good hemostasis, the skin was closed with interrupted 3/0 chromic

catgut. Foley catheter was left in place for 24 hour. Intravenous cephalosporin ‘was given perioneratively.
The patient was discharged on the third post-operative day. In the follow-up clinic at 2 and 6 weeks, the patient had nonnal glanular sensation with a rigid straight erection and with most of the haematoma being resolved spontaneously. Long term follow up is not available at present.

Discussion

Penile fracture is always associated with an erect penis, probably due to the rigidity and thinning of the tunica albugema from 2thm to 0.5 to 0.25 mm during erection. From 33 to 60% of the reported cases occurred during sexual intercourse[1]. Penile manipulation, traumatic masturbation and rolling over in the bed with an erect penis constitute the majority of the remaining cases[4]. The injury classically presents asasudden cracking sound with rapid detumescence, followedby pain, penoscrotal swelling andecchymosis. Cases associated with urethral injury usually present with blood at the meatus and or inability to void, but these signs do not rule out urethral injuly[1]. Urethral injuiy occurs in 10-20% of cases[1]. When urethral injury is suspected (blood at the meatus or inability to void) retrograde urethrography is necessary[1]. In fracture of the penis, the tear in the tunica albugenia is unilateral, almost always transverse, involves less than half of the circumference of the corpus cavemosum and occurs most frequently in the distal third of the penile shaft[5], while in this case, this involved the proximal third of penile shaft. Diagnosis is established by the typical history and physical examination and on occasion confirmed by cavernosography. The treatment of choice hasbeencontroversial. Until the middle of this century conservative treatment withice packs, analgesia and antibiotics was advocated[6]. Deformations of this penis with difficulty and pain during intercourse and erectile dysfunction is reported in 10-30% of the patients treated conservatively. In an extensive review[2], the complication rate in patients treated conservatively was 53%, the most common complication being pseudodiverticulum, penile deform.ity and painful erectjon. In the same study[2], the complication rate in surgically treated cases was only 10%. Though later studies show complete early recovery after surgical repair[3]. Immediate exploration and primary repair of corpus cavemosum is suggested[1]. Surgical repair is usually done through a circumcoronal incision. The penile skin is reflected back and the site of tear in tunica albuginea is identified and repaired. Some authors[5] recommend an incision over the site of tear, if known, in order to avoid unnecessary dissection. The advantages of immediate surgical repair include a shorter hospital stay and less chances of penile deformity[6]. Erectile function for these patients usually is normal after repair. Follow-up is short term and limited.

References

1. Timothy. T. and Alan. M Demby: Penile Fracture with urethral injuiy: J. Urol., 1992; 147:466-8.
2. Kalash, S.S. and Young, J.D. Controversy of surgical versus conservative treatment Urology. 1984;24:21-25.
3. Mansi,M.K..Emran.M. El.Mahrouky,A. et al Experience with penile fracture in Egypt: Long term results of immediate surgical repair: J. Trauma, 1993;35:67-70.
4. David, F., Penson-Aleen, D., Robert, 3K. et at. The hemodynamic pathophysi. ology of impotence following blunt trauma to the erect penis. J. Urol., 1992;148:1171-80.
5. Naraynsingh. V. and Taju, G.C. Fracture of the penis: Br. J. Surg., 1985;72:305.
6. Ozen, HA., Erkan, I., Alkibay, T. et al. Fractureofthepcnisand long term results ofsurgical treatment. Br.J. Urol., 1986;58:551.