PENILE FRACTURE: EXPERIENCE AT AYUB TEACHING HOSPITAL

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Background: Penile fracture is a relatively rare traumatic rupture of the tunica albuginea of one or both corpora cavernosa of an erect penis. It is a real urological emergency which needs early assessment and surgical management. **Methods:** Twelve (12) cases of penile fracture were reviewed from July, 1997 to July, 2007 in the Department of Urology, Ayub Teaching Hospital Abbottabad. All cases presented with classical history of penile fracture and the diagnosis was made on the basis of history and clinical examination only. **Results:** All the patients underwent immediate surgical repair with well preserved potency and excellent overall results. **Conclusion:** Penile fracture has typical signs. Standard treatment consists of immediate surgical repair of penile fracture with a low incidence of late complications. Post op complications including urethral strictures and erectile dysfunction should be ruled out by regular follow-up.

Keywords: Penile Fracture, Penis injuries

INTRODUCTION

Fracture of the penis is a relatively rare¹ and probably under reported urological emergency. It is defined as the rupture of tunica albuginea of one or both corpora^{2,3} due to direct trauma to the erect penis⁴ It can be accompanied by partial or complete urethral rupture, or with injury to a blood vessel such as the deep dorsal vein.^{5,6}

The injury to the tumescent corpora cavernosa may result due to non physiological bending of penile shaft with characteristic cracking sound and sudden pain followed by detumescence, swelling and ecchymosis. The massive swelling involves lateral deviation in the direction of unaffected side. 7.8

Immediate surgical repair of an albugineal tear markedly reduces the risk of post traumatic curvature, lowers the incidence of erectile dysfunction and allows earlier resumption of sexual activity. 9,10

The aim of this study was to review the pattern of penile fracture occurrence, clinical presentation and management with outcome at our unit.

PATIENTS & METHODS

All 12 cases of penile fracture reporting to Department of Urology, Ayub Teaching Hospital Abbottabad from July 1997 to July 2007 were included in this study. Clinical diagnosis was mainly based on the patient's history along with physical examination. Most of the cases presented immediately following injury. No investigation was deemed necessary. Immediate surgical repair (within 12 Hrs) was done with a circumferential coronal incision under the glans under GA. The postoperative period was unremarkable. All patients were recommended to abstain from sexual intercourse for ≥6 weeks. 14

RESULTS

The patients' Mean age was 30 years (range: 18–50 years). Five patients were single and seven were married. The commonest site of injury was the right side in 7 (58.3%), ventral in 4 (33.3%) and proximal in one patient (8.33%). Intra operatively, the traumatic lesion was transverse and the length of the lesion varied between 0.5 and 2.0 cm.

The most common cause of injury was vigorous sexual intercourse followed by masturbation.

The average time from injury to presentation was 10 hr (range: 1–12 hr). The patients presented with a cracking sound and sudden pain in an erect penis, followed by detumescence, swelling and ecchymosis.

The management included immediate surgical repair with antibiotics and anti-erectile medication. The hospitalization period varied from 3 to 21 days with uneventful recovery in all patients.

One year follow-up revealed preserved potency and urinary function in all the patients. Slight penile curvature in 2 cases (16.7%) did not impede sexual intercourse. None of the patient presented dysuria requiring urethral investigation.

The mean duration of transurethral catheterization was 13 days (range:10–16 days). The overall results were excellent.

DISCUSSION

The tunica albuginea, 2 mm thick in the flaccid state, is one of the toughest fasciae in the human body. Its thickness is reduced to 0.25–0.5 mm during erection and becomes vulnerable to traumatic injury. Most penile lesions occurs as a result of sexual activity, i.e., 'a false step' during coitus, e.g. during impact of the erect penis against female perineum or the pubic symphysis. The rupture is usually followed by

haematoma that can spread to the scrotum, perineum and supra-pubic area when Buck's fascia is disrupted.

No concomitant urethral or corpora cavernosa injury was seen in any of our patient.

For surgical repair synthetic absorbable sutures were used. The non absorbable sutures were avoided as they can cause painful or palpable knots. All the patients were given antibiotics to prevent infection and antierectile medication to reduce the possibility of fracture recurrence. Analgesics were given as and when required.

In the present study, prompt surgical intervention caused no complications, e.g., haematoma, nodules or the development of significant penile curvature.

CONCLUSION

Penile fracture has typical signs. Standard treatment consists of immediate surgical repair of penile fracture with a low incidence of late complications. Post-op complications including urethral strictures and erectile dysfunction should be ruled out by regular follow-up.

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