



Erectile Function Following Repair of Penile Fracture

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Abstract

Background and aim: Penile fracture is an uncommon condition that is defined the disruption of the tunica albuginea with rupture of the corpus cavernosum caused by trauma to the erect penis. Aim is to evaluate the clinical presentation and outcome of the treatment of penile fracture with special emphasis on erectile function.

Materials and Method: Retrospective study July 2016 to July 2021. 51 patients presented with suspected penile fracture. History, examination, type of injury and time to surgery noted. Degree of Erectile dysfunction was assessed by IIEF-5 at 3 and 6 months postoperatively

Results: 45 patients were available for follow up. 42 (93.3%) patients reported achieving adequate erection for intercourse without erectile or voiding dysfunction.

Conclusion: Early surgical repair within 48 hrs is associated with a good outcome

1599

KeyWords: IIEF-5, erectile dysfunction, mechanism of injury and time to surgery

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Introduction

Penile fracture is an uncommon condition that is defined the disruption of the tunica albuginea with rupture of the corpus cavernosum caused by trauma to the erect penis

True incidence is probably higher than reported as many patients do not seek medical attention due to embarrassment/fear. 1, 2

Immediate surgery results in

faster recovery,
decreased morbidity

lower complication rates, and

lower incidence of long-term penile curvature.

Timing of surgery may influence long-term success—

repair < 8 hrs of injury: better long-term results

surgery delayed 36 hrs after the fracture: poor results³

Penile fracture with early or delayed presentation up to 7 days should be managed surgically⁴

Risk factors for ED following repair of fracture penis:

age >50 years and

bilateral corporal involvement⁵

ED of either a psychological or vascular origin can be encountered as a long-term sequel of surgical treatment of penile fracture⁵

Aim

To evaluate the clinical presentation and outcome of the treatment of penile fracture with special emphasis on erectile function

Materials And Methods

Retrospective study July 2016 to July 2021

51 patients presented with suspected penile fracture.

Data recorded includes

Mode of presentation

Mechanism of injury

Delay in presentation

Preoperative penile ultrasound- when possible without delay in surgery

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Treatment given & intra op findings
Post-op complications

Follow up Included

Presence/absence of penile deformity
Degree of Erectile dysfunction was assessed by IIEF-5 at 3 and 6 months postoperatively
A score of 20 or higher indicates a normal degree of erectile functioning. Low score(10 or less) indicates moderate to severe ED.

Egg plant deformity of fracture penis Deformity of fracture penis

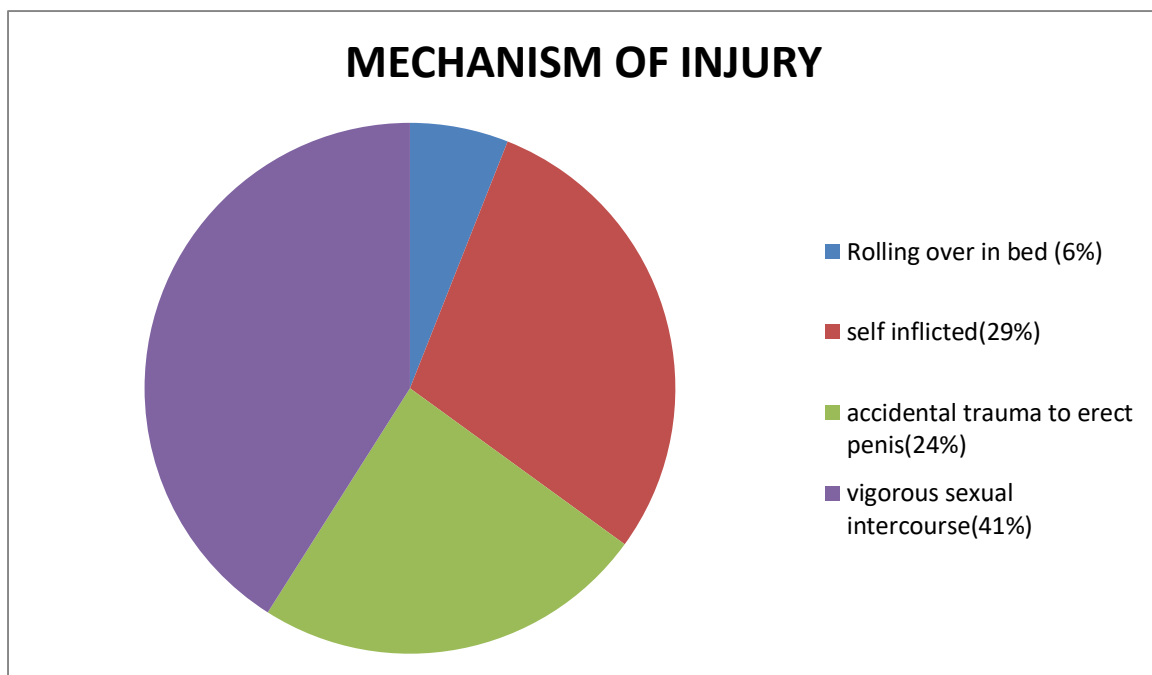


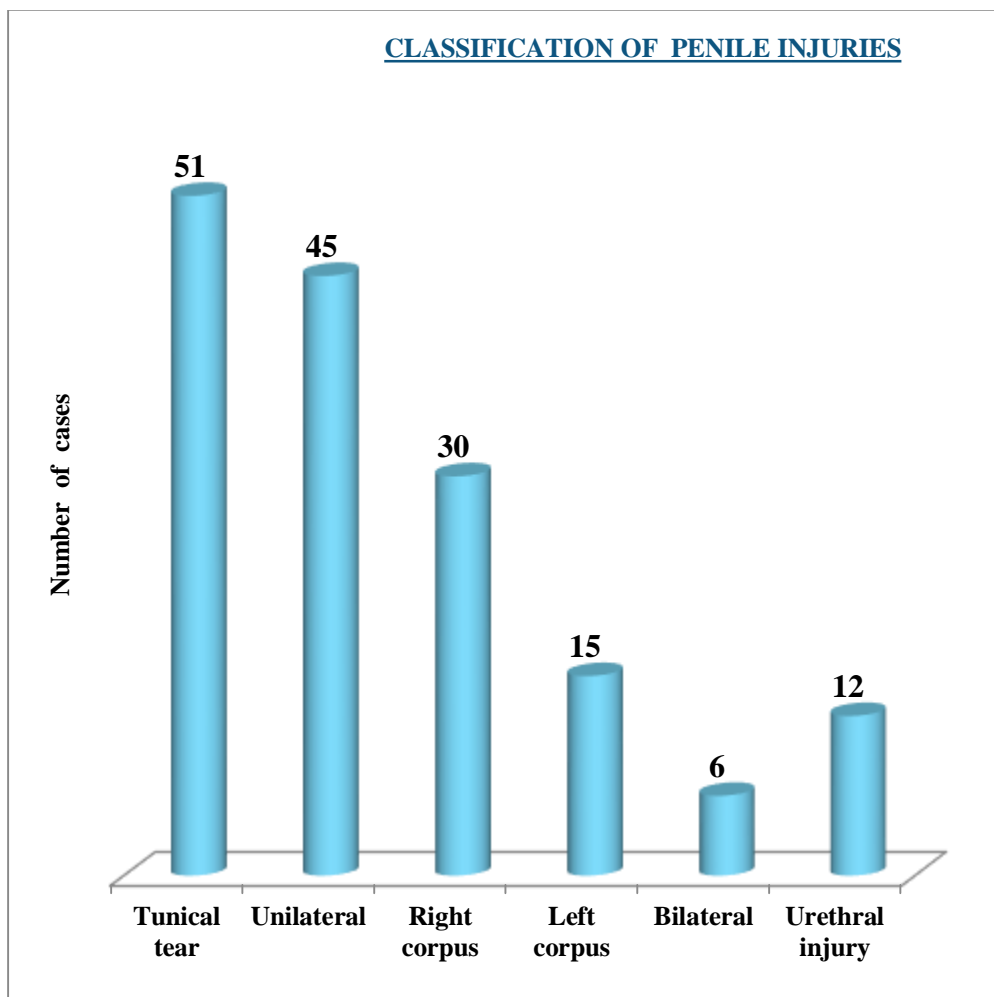
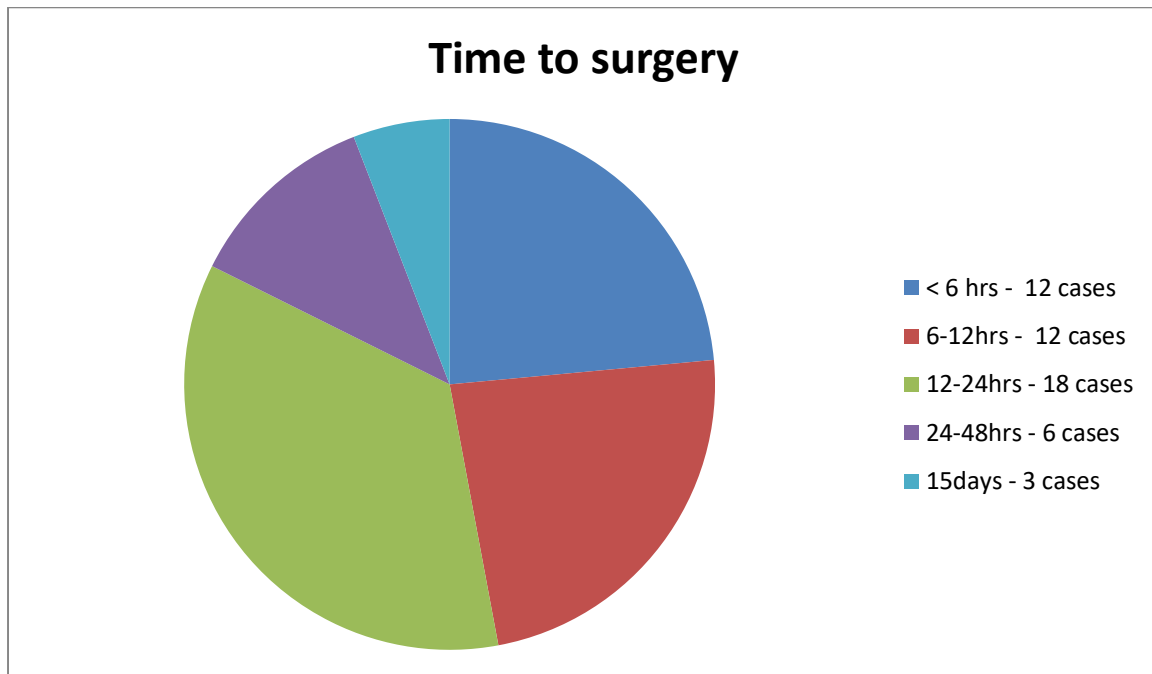
Results

Total patients-51
Age : mean 33.8 years (range -19-54 yrs)
45patients were available for follow up.
42(93.3%) patients reported achieving adequate erection for intercourse without erectile or voiding dysfunction.
The patient who presented late at 15 days had erectile dysfunction
No patient had any deformity of the penis

1600

Mechanism Of Injury





1601



Total Average IIEF 5 Score

At 3 months – 12.72, 13.4 if delayed injury is excluded

At 6months – 18.36, 19.4 if delayed injury is excluded

Patients with urethral injury had no post-op urinary symptoms (Qmax-32 ml/sec in three patients and 25 ml/sec in the other patient at 6 months)

Discussion

Mechanism of injury	Our study	Nawaz et al	Agarwal et al
Self manipulation	29.4%	40.8	6
Sexual intercourse	41.1%	28.46	88
Roll over/fall on penis	23.5	13.13	6
direct blow	5.8	8	0

Urethral Injury	No. of patients
Our study	12/51 (23.5%)
Ibrahiem et al	3/33 (9.1%)
Agarwal et al	12/51 (23.5%)

Erection adequate for sexual intercourse	% of patients
Our study	93.5
Nawaz et al	64.96
Ibrahiem at al	92.2
Agarwal MM et al	100
Ghilan A M et al	100

Conclusion

Immediate surgical intervention has: low morbidity, short hospital stay, rapid functional recovery, and no serious long-term sequelae. Early surgical repair within 48 hrs is associated with a good outcome

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