



## PELVIC FRACTURE URETHRAL DISTRACTION DEFECTS: A RETROSPECTIVE STUDY IN TERTIARY CARE HOSPITAL

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### KEYWORDS :

#### INTRODUCTION

Almost all injuries of the posterior urethra in the male occur in conjunction with fracture of the pelvis. In modern civilian society 90% of pelvic fracture injuries caused by motor vehicle accidents involving automobiles, motorcycle riders or pedestrians. Falls from height, Industrial crushing injuries and sporting accidents make up other 10% of cases. 10% pelvic fracture patients have associated urethral injuries. 90% urethral injury patients have associated pelvic injuries. Most of the pelvic injuries and associated urethral injuries occurs in younger individuals and associated with significant morbidity and mortality. Mortality rate from pelvic injuries are 14%. Mortality is mainly due to hypovolemic shock.

#### MATERIALS AND METHODS

Our study is a retrospective study of post traumatic stricture urethra for the period from September 2017 to JAN2021 at Guntur government hospital, Guntur. Our study consist of 14 cases from age group of 24 years to 60 years. **INCLUSION CRITERIA** were All cases of post traumatic stricture urethra associated with pelvic fracture **EXCLUSION CRITERIA** 1. Inflammatory urethral stricture 2. Urethral stricture following surgery – open and endoscopic procedure. 3. Stricture following traumatic catheterization 4. Recurrent stricture

#### RESULTS AND DISCUSSION

14 patients were included in our study. Among them 12 patients came to our hospital directly all the initial management done by us. 02 patients were referred to us for delayed management posterior urethral defect with SPC in situ.



FIG.1RGU



FIG.2 RGU + MCU



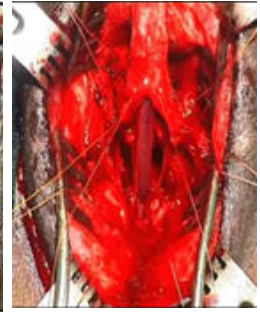
A. BULBAR URETHRAL  
MOBILIZATION



B. CRURAL SEPARATION



C. INFERIOR  
PUBECTOMY



D. URETHRAL  
ANASTOMOSIS

2 patients out 12 patients underwent emergency exploration for other associated injuries. Both of them had extra peritoneal rupture of bladder which was repaired and SPC was kept. All other 10 patients were managed with TROCAR SPC alone, was planned for definitive repair afterwards. Among 12 patients, 2 patients underwent stabilization pelvic fracture with fixators.

In our study commonly the elderly age group is affected. 75% of affected patient are in the group of 11 to 40 yrs. RTA is predominant cause for pelvic fracture and urethral distraction defect. Length of the stricture assessed by radiographic contrast method varies from 1 cm to 3.5 cm. Average stricture length - 2.5 cm.

Procedure done was perineal end to end urethroplasty in all patients. Out of 14 patients, in 05 patients bulbar urethral mobilization with crural separation was enough, in rest 09 patients inferior pubectomy was also required for proper anastomosis. Presence of scar tissue is responsible for restenosis, which require repeat dilatation / internal urethrotomy. Erectile dysfunction was present in 04 patients prior to surgery. Among them 1 patient regained their erectile function and another one patient developed erectile dysfunction following urethroplasty. No patient developed incontinence. No deformity on walking.

Among 14 patients who underwent perineal end to end urethroplasty, all patients voided normally with Qmax more than 15 ml/sec postoperatively after catheter removal. 02 patients required auxiliary procedures in the form of repeat dilatation or internal urethrotomy. 2 patients had anastomotic narrowing may be because of incomplete excision of the callous portion. Both of them were treated by OIU. According to the literature the success rate for any anastomotic urethroplasty is above 90%.

#### CONCLUSION

RTA is the major cause of pelvic fracture urethral distraction defects in my study.

Pelvic fracture urethral distraction defect significantly affects age group 40 to 50 years.

The gold standard is Perineal urethroplasty.

Transpubic urethroplasty is a very useful procedure in case complex PFUDD.

There is no significant complications associated with perineal urethroplasty in experienced centers. Location of distraction defects, Length of distraction defect, Amount of fibrosis and Presence of callous in between the distracted ends of urethra are the factors which determine the selection of the surgical procedure.

In our study success rate of urethroplasty is nearly 85%. With auxillary procedures more than 90 %. Erectile dysfunction was present 10 percent of patients post operatively. Incontinence – nil.

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