PREDICTORS OF THERAPEUTIC EFFECTS OF THE PRIMARY ENDOSCOPIC URETHRAL REALIGNMENT IN MALE URETHRAL INJURY

Hypothesis / aims of study
Primary urethral realignment has been tried by some investigators as an alternative means of treatment, in an effort to avoid long-term suprapubic drainage, as well as to simplify future reconstructive efforts. Therefore early primary endoscopic urethral realignment is considered as a promising primary treatment method for the male urethral injury. We retrospectively evaluated variable factors affecting the effectiveness of the primary endoscopic urethral realignment in male urethral injury to identify the significant risk factors.

Study design, materials and methods
Male patients who were treated for the urethral injury at our hospital between January 1995 and May 2006 were included in the study. Primary endoscopic urethral realignment was done in 69 patients out of 73. 4 patients who were not feasible for lithotomy position were excluded. Foley catheter was removed when there was no urine leakage, post op 14th day. Evaluation of urethral stricture was done in 6 months after the procedure. Cystoscopy and retrograde urethrography were done to rule out urethral stricture in patients presenting with newly developed voiding symptoms.

Results
The mean age of 69 patients was 52.8±9.4 years (5-73) and the operations were carried out within 72 hours after the injury. 57 patients with anterior urethral injury underwent primary endoscopic urethral realignment. Primary endoscopic urethral realignments were achieved in 4 patients with posterior urethral injury. In terms of severity of the injury, complete urethral inuries presented 6 patients and partial urethral injury 62 patients. There were 2 of the 4 patients suffered from complete injury and the remaining 2 presented with partial injury. During the follow-up period, urethral stricture was detected in 14 patients, 5 of whom were treated with internal urethrotomy once or twice and 9 of whom underwent internal urethrotomy or open surgery more than three times. Of the 14 urethral stricture, Anterior urethral injury was found in 4 patients and posterior urethral injury in 10 patients.

Interpretation of results
Predictor of the therapeutic effects of the primary endoscopic urethral realignment in male urethral injury is the site of urethral injury, which is significant p-value(0.001)

Concluding message
Most anterior urethral injury were resolved with primary urethral realignment. However for the posterior injury, some additional surgical treatments were needed. The site of urethral injury was found to be the most affecting factor on the recurrence. Long follow-up will further validate a randomized prospective study at a larger scale.

References