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# 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 reconstructiveefforts. 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 14<sup>th</sup> 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 injururies 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

Ir Med J. 2007 Jun;100(6):488-9. Urol J. 2005 Fall;2(4):211-5. Urol Clin North Am. 2006 Feb;33(1):87-95, vii.

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Is this a clinical trial?	Yes
Is this study registered in a public clinical trials registry?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	No
This study did not require eithics committee approval because	there was no harm to any patients
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes