Efficacy of holmium laser enucleation of prostate according to preoperative patients' characteristics: prostate size, bladder outlet obstruction, detrusor overactivity and detrusor contractility

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PURPOSE

- We evaluate the efficacy of holmium laser enucleation of prostate (HoLEP) according to prostate size, bladder outlet obstruction (BOO), detrusor overactivity (DO), detrusor contractility and evaluate the factors influencing success of HoLEP.

MATERIALS & METHODS

- A retrospective study
- The patients who underwent HoLEP for benign prostate hyperplasia from 2009 to 2013 at our institution
- Exclusion criteria: neurologic disorders, other urologic disease such as urinary calculi, urethral stricture, and prostate cancer
- Preoperative evaluation: Prostate specific antigen (PSA), prostatic size by transrectal ultrasonography, urodynamic study parameters, International Prostate Symptom Score (IPSS)/Quality of life (QoL)
- Surgical outcome evaluation at postoperative 6 months: IPSS/QoL - maximum flow rate (Qmax) and post void residual urine (PVR)
- Treatment success: median value of efficacy score demonstrate more than 2.

RESULTS

- Success rates analyzed by prostate size, BOO, DO and BCI

The change of parameters between preop- and postop 6months

Multiple logistic regression analysis of factors influencing success of HoLEP at 6 months postoperatively

CONCLUSIONS

- HoLEP improved LUTS and urine flow in most of the patients with BPO, irrespective of the pre-operative parameters.
- However, surgical outcome was more significant in patients with higher degree of BOO.