

## EFFECT OF PREOPERATIVE URODYNAMIC DETRUSOR UNDERACTIVITY ON TRANSURETHRAL SURGERY FOR BENIGN PROSTATIC HYPERPLASIA: SYSTEMATIC REVIEW AND META-ANALYSIS

### Hypothesis / aims of study

To investigate the effect of urodynamic detrusor underactivity (DUA) on transurethral surgery for benign prostatic hyperplasia (BPH).

### Study design, materials and methods

We systematically searched online Pubmed, Embase, and Cochrane Library database from January 1989 to June 2014.

### Results

A total of 7 articles met the eligibility criteria for this systematic review. The eligible studies included a total of 492 patients with a median number of 71 patients per study (range: 40 - 92). Of the 7 studies, 5 conducted conventional transurethral prostatectomy (TURP), 2 performed the photoselective vaporization of the prostate (PVP). In patients with detrusor underactivity (DUA), pooled mean differences (MDs) were significant for the poorer improvement of International Prostatic Symptom Score (IPSS) (pooled MD, -5.83; 95% confidence interval [CI], -7.18 – -4.49; studies, 6; participants, 340) and maximal flow rate (Qmax) (pooled MD, -3.86; 95% CI, -4.93 – -2.80; studies, 5; participants, 355), but not in that of quality of life score (QoL) (pooled MD, -0.27; 95% CI, -0.98 – 0.44; studies, 5; participants, 355) and post-void residual volume (PVR) (pooled MD, -7.36; 95% CI, -25.41 – 10.68; studies, 6; participants, 375). Some comparisons showed between-study heterogeneity in spite of strict selection criteria of included studies. However, there was no clear evidence of publication bias in this meta-analysis.

### Interpretation of results

Our meta-analysis results showed that preoperative DUA was correlated with poorer improvement of IPSS and Qmax.

### Concluding message

To rule out DUA using preoperative UDS may be helpful for improvement of postoperative outcomes after surgical treatment of BPH.

### Disclosures

**Funding:** Supported by grant no 23-2015-0050 from SNUH Research Fund. **Clinical Trial:** No **Subjects:** NONE