

EFFECTS OF DETRUSOR UNDERACTIVITY ON OUTCOME OF TRANSURETHRAL RESECTION OF THE PROSTATE IN PATIENTS WITH PROSTATE HYPERPLASIA

Hypothesis / aims of study

The main mechanisms of male lower urinary tract symptoms (LUTS) consisted of bladder outlet obstruction and bladder detrusor contractility. Overestimated effect of detrusor underactivity kept one, who should be controlled with operative treatment, managing by over-period medical therapy. But, practical effects of patients with detrusor underactivity (DUA) who accepted transurethral resection of prostate (TUR-P) have shown to be similar, even quite improvements on LUTS compared to patients with normal detrusor activity. We tried to find out the state of DUA could be one of the indications of TUR-P.

Study design, materials and methods

Between 2007 and 2011, 116 patients with LUTS, who treated by TUR-P, were investigated. Transrectal ultrasonography and filling cystometry were performed to determine bladder outlet obstruction and detrusor contractility before TUR-P. The efficacy of TUR-P was determined within 12 months after surgery using the international prostate symptom score (IPSS). The state of DUA was defined as a condition in which pressure flow study with detrusor pressure at a maximum flow rate <10 cm H₂O accompanied by an increase in abdominal pressure. Patients, who did not confined to normal detrusor activity and DUA, are excluded. Severe LUTS was defined as a condition in which IPSS is over 20.

Results

On preoperative cystometry, 37 (32%) patients showed normal detrusor activity (group A), 47 (41%) of patients showed DUA (group B). Preoperatively group B had significantly higher than group A in average IPSS (group A: 20.43 ± 5.48 vs 22.26 ± 5.19 , $P < 0.001$). After TUR-P, average IPSS improvement in group A were 7.87 ± 0.12 , whereas 6.79 ± 0.49 in group B ($P = 0.536$). Relative risk of DUA on severe LUTS is 0.926 ($P = 0.138$) pre-operatively, and 1.021 ($P = 0.682$) postoperatively.

Interpretation of results

Concluding message

According to detrusor activity, there were not different in differences between preoperative or postoperative IPSS. Abnormal detrusor contractility (esp. DUA) cannot be a contraindication for TUR-P, and TURP should be a definite therapeutic option in abnormal detrusor activity.

Disclosures

Funding: no **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Inje University Sanggye Paik Hospital **Helsinki:** Yes **Informed Consent:** Yes