

## 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.

### Study design, materials and methods

Between 2005 and 2010, 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). Patients, who did not confined to normal detrusor activity and DUA, are excluded. Severe LUTS was defined to patients with IPSS over 20.

### Results

On preoperative cystometry, 37 (32%) patients showed normal detrusor activity, 47 (41%) of patients showed DUA. After TUR-P, average IPSS improvement in patients with normal detrusor activity were  $7.87 \pm 0.12$ , whereas  $6.79 \pm 0.49$  in patients with DUA ( $P=0.536$ ).

### Interpretation of results

According to detrusor activity, there were no statistical differences between preoperative or postoperative IPSS.

### Concluding message

Abnormal detrusor contractility (esp. DUA) cannot be a contraindication for TUR-P, and TURP should be a definite therapeutic option in abnormal detrusor activity.

### References

1. Thomas AW, Cannon A, Bartlett E, Ellis-Jones J, Abrams P. The natural history of lower urinary tract dysfunction in men: the influence of detrusor underactivity on the outcome after transurethral resection of the prostate with a minimum 10-year urodynamic follow-up. *BJU Int.* 2004;93(6):7457-50.
2. Tanaka Y, Masumori N, Itoh N, Furuya S, Ogura H, Tsukamoto T. Is the short-term outcome of transurethral resection of the prostate affected by preoperative degree of bladder outlet obstruction, status of detrusor contractility or detrusor overactivity? *Int J Urol.* 2006;13(11):1398-404.
3. Seki N, Kai N, Seguchi H, Takei M, Yamaguchi A, Naito S. Predictives regarding outcome after transurethral resection for prostatic adenoma associated with detrusor underactivity. *Urology* 2006;67(2):306-10.

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<b>Is this a clinical trial?</b>	<b>Yes</b>
<b>Is this study registered in a public clinical trials registry?</b>	<b>No</b>
<b>Is this a Randomised Controlled Trial (RCT)?</b>	<b>No</b>
<b>What were the subjects in the study?</b>	<b>HUMAN</b>
<b>Was this study approved by an ethics committee?</b>	<b>No</b>
<b>This study did not require ethics committee approval because</b>	<b>this is a retrospective observational study. We didn't any treatment or any harm for the study. So, this study did not approved by an ethics committee. However we will submit this study to the ethics committee for approval.</b>
<b>Was the Declaration of Helsinki followed?</b>	<b>Yes</b>
<b>Was informed consent obtained from the patients?</b>	<b>No</b>