

IS THE SHORT-TERM OUTCOME OF TRANSURETHRAL RESECTION OF THE PROSTATE AFFECTED BY THE PREOPERATIVE DEGREE OF BLADDER OUTLET OBSTRUCTION SEEN ON URODYNAMIC STUDY?

Hypothesis / aims of study

To investigate whether the preoperative degree of bladder outlet obstruction seen on urodynamic study affect the short term outcome of transurethral resection of the prostate (TURP) for patients with lower urinary tract symptoms of benign prostatic hyperplasia (LUTS/BPH).

Study design, materials and methods

Three hundred thirty one patients with LUTS/BPH who underwent TURP were included in this study. International Prostate Symptom Score (IPSS) and quality of life score (QoL), urodynamic study and transrectal ultrasound for estimating the prostate volume were performed preoperatively. Patients were divided into 3 groups according to Abrams-Griffiths number (AG number): obstructed, equivocal and unobstructed. The efficacy of TURP was determined at 3 months later assessed by the IPSS, QoL and uroflowmetry.

Results

For the total 331 patients, there were 186 obstructed patients (56.2%), 110 equivocal patients (33.2%) and 35 unobstructed patients (10.6%). The prostate volume of the obstructed, equivocal and unobstructed groups was 63.8 ± 28.8 g, 45.2 ± 20.4 g and 49.1 ± 21.9 g, respectively. The preoperative maximum flow rate was 8.6 ± 3.8 ml/s, 9.5 ± 3.9 ml/s and 10.2 ± 4.7 ml/s, respectively. The postoperative improvement of the maximum flow rate was 8.4 ± 7.5 ml/s, 6.2 ± 6.2 ml/s and 4.0 ± 5.8 ml/s, respectively. The postoperative improvement of the IPSS and QoL did not differ among the three groups.

Interpretation of results

The postoperative improvement of the maximum flow rate in the unobstructed group was lower than that of the obstructed and equivocal groups. But the improvement of the IPSS and QoL was not different between the three groups. So TURP was effective in improving symptoms of BPH/LUTS patients regardless of BOO.

Concluding message

TURP may be a possible therapeutic modality even in the unobstructed BPH patients in short term periods. Long-term results should be required.

Table 1. Patients' characteristics between the three groups

	Obstructed group	Equivocal group	Unobstructed group	p value
No(n=331)	186	110	35	
Age(years)	70.3 ± 8.3	68.0 ± 7.4	69.6 ± 8.3	0.065
Prostate volume(g)	63.8 ± 28.8	45.2 ± 20.4	49.1 ± 21.9	<0.001
PSA(ng/ml)	6.2 ± 7.4	4.7 ± 7.2	5.6 ± 7.7	0.167
AG number	66.8 ± 26.1	29.2 ± 6.3	11.6 ± 5.6	<0.001
Qmax(ml/s)	8.6 ± 3.8	9.5 ± 3.9	10.2 ± 4.7	0.045
Voided volume(ml)	159.6 ± 95.0	195.5 ± 118.6	180.0 ± 131.4	0.040
IPSS	21.1 ± 8.9	21.0 ± 7.4	17.7 ± 9.7	0.215
QoL	4.2 ± 1.3	4.4 ± 1.1	4.0 ± 1.2	0.517

Table 2. Postoperative improvement of the uroflowmetry parameters, IPSS and QoL

	Obstructed group	Equivocal group	Unobstructed group	p value
Qmax(ml/s)	8.4 ± 7.5	6.2 ± 6.2	4.0 ± 5.8	0.008
Voided volume(ml)	92.4 ± 128.4	88.0 ± 135.7	51.5 ± 145.6	0.444

IPSS	12.8±9.3	11.5±8.3	7.2±6.7	0.111
QoL	2.7±1.8	2.7±1.8	2.1±1.6	0.519

References

1. none

<i>Specify source of funding or grant</i>	not
<i>Is this a clinical trial?</i>	Yes
<i>Is this study registered in a public clinical trials registry?</i>	No
<i>Is this a Randomised Controlled Trial (RCT)?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	institutional review board of Eulji Medical center
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	No