

IMPACT OF INTRAVESICAL PROTRUSION OF THE PROSTATE IN THE TREATMENT OF LUTS/BPH BY ALPHA RECEPTOR ANTAGONIST

Hypothesis / aims of study

To evaluate whether intravesical protrusion of the prostate (IPP) is related to treatment effect of alpha receptor antagonist in patients with lower urinary tract symptoms(LUTS)/benign prostatic hyperplasia (BPH).

Study design, materials and methods

A total of 77 BPH patients over 40 years of age treated with alfuzosin were enrolled prospectively. The patients were classified into two groups depending on the presence of IPP : IPP group (41 patients) and non-IPP group (36 patients). Prostate volume, prostate-specific antigen (PSA), International Prostate Symptom Score and Quality of Life (IPSS/QoL), maximal urine flow rate (Qmax), and postvoid residual (PVR) volume were evaluated before and after treatment for 8 weeks.

Results

PSA and IPSS(total and voiding subscore) showed significant correlations with IPP ($p < 0.05$). Comparison of parameters before and after 8 weeks showed that alfuzosin improved total IPSS and all subscores ($p < 0.001$), QoL ($p < 0.001$), Qmax ($p < 0.001$), and PVR ($p = 0.030$) in IPP and non-IPP group, both. But alfuzosin treatment was more effective in the non-IPP group (Table 1, 2)

Interpretation of results

IPP made it difficult to treat the LUTS/BPH with alfuzosin.

Concluding message

In presence of IPP, alfuzosin may be less effective in improving symptom scores, PVR and Qmax in treatment of LUTS/BPH.

Table 1. Clinical data at first visit

Parameter	IPP group	non-IPP group	p value	
No	41	36		
Age (yr)	67.2±6.9	64.5±8.1	0.125	
tPSA (ng/ml)	1.61±1.1	1.04±0.48	0.013	
PV (cm ³)	33.3±6.2	31.2±6.1	0.276	
IPSS	total	22.2±4.9	18.4±4.6	0.004
	voiding	14.4±3.8	11.8±3.6	0.014
	storage	7.9±2.7	6.5±3.8	0.068
QoL	4.4±1.0	4.2±0.9	0.351	
PVR	65.5±51.3	47.3±43.9	0.255	
Qmax	8.9±2.8	9.9±3.9	0.424	

Table 2. Clinical data after 2 months of alfuzosin treatment

parameter	IPP group	non-IPP group	p value	
IPSS improvement (%)	total	28.7±11.9	50.6±20.3	0.0001
	voiding	29.2±13.8	54.4±19.6	< 0.0001
	storage	24.2±22.0	41.6±28.0	0.03
QoL improvement (%)	24.8±19.8	44.2±19.7	0.001	
PVR improvement (%)	12.3±77.0	44.4±36.3	0.02	
Qmax improvement (%)	30.5±33.8	68.7±51.8	0.0006	

Disclosures

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