

## CORRELATION OF MALE OVERACTIVE BLADDER WITH INTRAVESICAL PROSTATIC PROTRUSION

### Hypothesis / aims of study

Overactive bladder in male may be caused by prostatic pathology such as bladder outlet obstruction (BOO). Intravesical prostate protrusion (IPP) has been found to correlate with BOO and acute urinary retention (AUR). We supposed that IPP, in addition to BOO, is more likely to be correlated with OAB symptoms in male. So we investigated the interrelation between male OAB symptoms and the IPP checked by transrectal ultrasonography (TRUS) for estimating the anatomical change of the prostate.

### Study design, materials and methods

We assessed 136 consecutive men aged >40 years who presented with lower urinary tract symptoms at their first visit. The initial evaluation included medical history, International Prostate Symptom Score (IPPS) and quality-of-life assessments, free uroflowmetry and postvoid residual urine volume assessments. The degree of IPP was determined by measuring the vertical distance from the tip of the protrusion to the circumference of the bladder at the base of the prostate gland. Among all patients, patients having IPP <0.5cm was defined to group I, and patients having 0.5cm ≤ IPP <1cm was defined to group II. The others (IPP ≥1cm) were defined to group III. The  $\chi^2$  test was used for the voiding symptoms and IPP, with significance determined at p value < 0.05.

### Results

From August 2006 to December 2008, 136 patients were involved in the study. The storage IPPS differed significantly between group I and group II or III. 75 patients of them were having OAB symptoms such as urgency, urge incontinence as the chief complaint. 20 patients of group I (n=53), 34 patients of group II (n=47) and 21 patients of group III (n=36) has was having OAB symptoms. 27 patients had acute urinary retention (AUR) past history. 9 of group I, 8 of group II and 10 of group III patients had AUR history.

### Interpretation of results

There was statistically correlation between IPP and OAB symptoms (p=0.042). There was statistically significance between IPP and AUR, as well (p=0.043). The results of our study have shown that IPP was correlated with AUR and male OAB symptoms.

### Concluding message

IPP may be one of the causes of male OAB. However, larger scale studies are needed to confirm the results.

### References

1. Anatomic configuration of prostate obtained by noninvasive ultrasonography can predict clinical voiding parameters for determining BOO in men with LUTS
2. Clinical significance of intravesical prostatic protrusion in patients with benign prostatic enlargement

<b><i>Specify source of funding or grant</i></b>	<b>No</b>
<b><i>Is this a clinical trial?</i></b>	<b>Yes</b>
<b><i>Is this study registered in a public clinical trials registry?</i></b>	<b>No</b>
<b><i>What were the subjects in the study?</i></b>	<b>HUMAN</b>
<b><i>Was this study approved by an ethics committee?</i></b>	<b>Yes</b>
<b><i>Specify Name of Ethics Committee</i></b>	<b>Ilsan Hospital IRB Committee</b>
<b><i>Was the Declaration of Helsinki followed?</i></b>	<b>Yes</b>
<b><i>Was informed consent obtained from the patients?</i></b>	<b>No</b>