

INTERRELATIONSHIP OF INTRAVESICAL PROSTATIC PROTRUSION AND OVERACTIVE BLADDER IN THE AGING MALE

Hypothesis / aims of study

Overactive bladder in the aging 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). So we investigated the interrelation between OAB symptoms in the aging male. IPP checked by transrectal ultrasonography (TRUS) for estimating the anatomical change of the prostate.

Study design, materials and methods

We assessed 102 consecutive men aged >40 years old who presented with lower urinary tract symptoms at their first visit. The initial evaluation included medical history, International Prostate Symptom Score (IPSS) and quality - of - life assessments, TRUS, free urolowmetry 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 (n=75), and patients having 0.5cm≤ IPP <1cm was defined to group II (n=21). The others (IPP ≥1cm) was defined to group III (n=6). The χ^2 test was used for the voiding symptoms and IPP, with significance determined at p value < 0.05.

Results

From August 2006 to March 2009, 102 patients were involved in the study. The mean age was 62.5±11.9 years. The mean prostate volume and IPSS were 47.4±36.6 g and 16.1±7.1, respectively. Of the 102 patients, 47 patients (46.1%) was having OAB symptoms such as urgency, urge incontinence as the chief complaint. 28 patients (27.5%) of all had developed AUR history. OAB symptoms were 37.3% in group I, 39.5% in group II and 66.7% in group III. There was statistically significance between IPP and OAB symptoms (p=0.042). 18 patients of group I, 7 patients of group II and 3 patients of group III has was having AUR history, but there was no statistically significance between IPP and AUR (p=0.28).

Interpretation of results

There was statistically correlation between IPP and OAB symptoms in the aging male (p=0.042). There was no statistically significance between IPP and AUR (p=0.28). The results of our study have shown that IPP was related with OAB symptoms in the aging male.

Concluding message

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

References

1. Nose H, Foo KT, Lim KB, Yokoyama T, Ozawa H, Kumon H. Accuracy of two noninvasive

Specify source of funding or grant	No
Is this a clinical trial?	Yes
Is this study registered in a public clinical trials registry?	Yes
Specify Name of Public Registry, Registration Number	NHIC Ilsan Hospital IRB
Is this a Randomised Controlled Trial (RCT)?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	NHIC Ilsan Hospital IRB
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes