

## **DETRUSOR OVERACTIVITY IN PATIENTS WITH BENIGN PROSTATIC OBSTRUCTION: THE CLINICAL AND URODYNAMIC CHARACTERISTICS**

### **Hypothesis / aims of study**

Benign prostatic obstruction (BPO) and detrusor overactivity (DO) are the important factors that cause lower urinary tract symptom for men. We need to differentiate these two causes for adequate treatment. But it is true that these are usually coexisting. So we reviewed the clinical and urodynamic characteristics of the BPO patients coexisting with DO.

### **Study design, materials and methods**

We included 119 patients who were aged over 50 years and diagnosed as the bladder outlet obstruction (BOO) on urodynamic study. Patients with neurologic history that might affect their bladder function were excluded. All patients were systemically examined with digital rectal exam, transrectal ultrasound, s-PSA, urodynamic study and also completed International Prostatic Symptom Score (IPSS), ICS male questionnaires. After pressure-flow study, we defined BOO based on Abrams-Griffiths number ( $\geq 20$ ). Patients were divided into pure BOO group and combined with idiopathic detrusor overactivity (IDO) group, and clinical and urodynamic variables were compared.

### **Results**

Of the 119 BPO men, 57 patients (48%) were combined with IDO. The patients who had combined with IDO were older (68 ( 9.8 vs. 60 (8.9 years,  $p < 0.05$ ), had lower maximal cystometric capacity (321 ( 94 vs. 429 ( 113 ml,  $p < 0.05$ ), and more obstructed (AG number: 44 ( 21.6 vs. 35.6 ( 13.5,  $p < 0.01$ ) than pure BPO patients. The incidence of IDO had increased with obstruction grade from 40% in AG number 20-40 group to 51% and 75% in 40-60, more than 60 group, respectively ( $p < 0.05$ ). The patient who were older had higher incidence of IDO on comparison based on age (50-60 years: 23%, 60-70 years: 44%,  $\geq 70$  years: 83%,  $p < 0.05$ ). At the comparison of the symptom questionnaires, we found that BPO combined with IDO group had higher scores than pure BPO group in storage symptom (IPSS: 9.1 ( 3.8 vs. 11.8 ( 3.1, ICS male questionnaires: 9.8 ( 3.0 vs. 12.8 ( 3.7,  $p < 0.05$ ).

### **Concluding message**

These data indicate that BPO with IDO is considered to be more progressed disease as more pronounced obstruction and older age were noted than pure BOO. And the incidence of BPO with IDO would increase as irritative symptom score increases.