Zhang W<sup>1</sup>, Song Y<sup>1</sup> **1.** Department of Gynecology and Obstetrics, Fuzhou Dongfang Hospital

# URGENCY IS THE KEY SYMPTOM OF OVERACTIVE BLADDER SYMPTOMS, AS DEMONSTRATED BY A COMMUNITY-BASED SURVEY AND STATISTICAL ANALYSIS

### Hypothesis / aims of study

We determined overactive bladder symptoms (OAB) in combination with other lower urinary tract symptoms and illustrated their relationships using log linear statistical analysis. Furthermore, We randomly sampled a community-based population to evaluate the prevalence of OAB.

## Study design, materials and methods

We randomly sampled 6066 women (3.0% of registered female residents aged 20 years and older in Fuzhou) and mailed Bristol Female Lower Urinary Tract Symptoms questionnaire for women self-completion. 4684 (77.2%) women with evaluable data were included in this study. A log linear statistical model was applied to assess associations among the symptoms of OAB

### **Results**

Most OAB patients reported urgency combined with other lower urinary tract symptoms. These symptom can be categorized into 2 main group: one is associated with dry symptoms (frequency, nocturia), the other is associated with wet symptoms (urge incontinence, mixed incontinence). Few patient may have OAB symptoms combined with voiding difficulty symptoms. The prevalence of OAB was 8.0%, OAB dry 2.4% and OAB wet 5.6%.

### Interpretation of results

13.4% women had voiding symptoms. Among the symptoms of OAB, stress incontinence was the most common symptom (16.6%), followed by frequency (16.4%), urgency (10.2%), urge incontinence (10.0%) and nocturia (9.9%). Log linear analysis was applied to assess associations among these LUTS. The results of the likelihood ratio rate indicate that the log linear model fit adequately (p=0.857). Strong 2 symptom associations were noted between urgency and others LUTS, between frequency and nocturia (dry symptoms), between urge incontinence and stress incontinence (wet symptoms), and between frequency and voiding difficulty (each p<0.05). However, no significant association was found between the wet and dry symptom subgroups. For 3 symptom interactions a strong association was noted among urgency, frequency and nocturia, among urgency, urge incontinence and stress association was noted only among urgency, urge incontinence, stress incontinence and voiding difficulty (each p<0.05). For 4 symptom interactions a significant association was found between stress incontinence and voiding difficulty (each p<0.05). These results indicated there were 2 main subtypes of female OAB syndrome with different symptoms in combination, ie urgency with wet symptoms, urgency with dry symptoms. In addition, there was a small number of patients who may have OAB symptoms in combination with voiding difficulty symptoms.

### Concluding message

Urgency is the key symptom of OAB syndrome, and there are 2 main distinctive OAB subtypes, which differ in their symptom combinations. The prevalence of OAB in chinese women is lower than that of most reports in Occidental women.

### **References**

[1] Urology (2004) 64; 2-6.

[2] Neurourol Urodyn (2002) 21; 167-78.

<sup>[3]</sup> Urology (2005) 66; 230-3.

Specify source of funding or grant	420
Is this a clinical trial?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	Fuzhou Ethics Committee
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes