

# **Morphologic association of female lower urinary tract symptoms in primary urodynamic stress incontinence.**

楊淑惠

Yang JM;Yang SH;Huang WC

## **Abstract**

**Background:** To explore the morphologic association of female lower urinary tract symptoms with anterior vaginal wall relaxation in women with primary urodynamic stress incontinence.

**Patients and Methods:** The records of 782 women who were diagnosed with primary urodynamic stress incontinence and also had ultrasonographic evaluation of the lower urinary tract were retrospectively reviewed. Clinical data recorded in the database at the time of evaluation included demographic data, a symptom questionnaire, and results of a pelvic examination, urodynamic study and ultrasound cystourethrography. The symptom questionnaire addressed six categories of lower urinary tract symptoms, including urinary frequency, nocturia, urgency, urge incontinence, stress incontinence, and voiding difficulty. Bothersome severity of stress incontinence was assessed using a 6-point Likert scale. Morphologic characteristics of the lower urinary tract were evaluated at rest and during maximal Valsalva maneuver by introital ultrasonography.

**Results:** Of the 782 study subjects, 363 (46.4%) had urinary symptoms other than stress incontinence, and 82 (10.5%) did not report symptomatic stress incontinence. A significantly lower Ba point, determined by the pelvic organ prolapse quantification system, was found in subjects who did not report stress incontinence when compared with those who did ( $p = 0.017$ ). The symptom of stress incontinence was related to a greater straining bladder neck angle, whereas urgency was related to a smaller angle. Subjects who had urge incontinence had a significantly higher incidence of bladder neck funneling during stress than those who did not have urge incontinence ( $p = 0.033$ ). Subjects with stress incontinence had a significantly lower incidence of prolapsing bladder base than those without stress incontinence ( $p = 0.012$ ).

**Conclusion:** In subjects with primary urodynamic stress incontinence, the symptoms of urinary frequency, nocturia, and voiding difficulty were not associated

with any morphologic characteristic, whereas urgency, urge incontinence, and stress incontinence were associated with specific morphologic features on ultrasonography.