

WHICH WOMEN WITH STRESS URINARY INCONTINENCE REQUIRE URODYNAMIC EVALUATION?

Aims of Study

As many as 30 to 50 % of women with stress urinary incontinence (SUI) reported symptom of overactive bladder(OAB). The presence of OAB may affect the results of SUI treatment. On the other hand, many studies were made on the sensitivity of urinary incontinence symptoms for the diagnosis of genuine SUI with conflicting results. In the present study, we determined whether the clinical evaluations based on symptoms and physical examinations can be used to define a group of women on whom urodynamic assessment is unnecessary prior to offering surgery for SUI. We also wanted to determine how many proportion of the women with mixed urinary incontinence symptoms had urodynamically proven detrusor instability(DI).

Methods

We evaluated 255 women with SUI between January 1997 and February 2001. Clinical variables were assessed by means of standardized history, physical examination. A urodynamic diagnosis of pure SUI or DI were used as the criterion standards. Women with known neurological diseases were excluded. The women with symptoms of SUI was divided into a group of patients who had symptoms of pure SUI, and who had SUI as well as OAB. Clinical and urodynamic variables were analyzed to identify the sub-groups of women who doesn't require urodynamic study before initiating the treatment for SUI.

Result

The average age was 52.2±10.5. The average age of women with urge incontinence was significantly higher than those with SUI only (p<0.05). In urodynamic studies, bladder capacity and compliance were significantly lower in a group with urge symptoms. The volume of post-void residual was significantly larger in a group with urge incontinence (P<0.05). Of the total (255), 198 (77.6 %) had SUI, 57 (22.4%) had DI. Of the 154 women with coexisting OAB, 116 (75.3 %) had SUI, 52 (33.8%) had DI. Of the 101 women with symptoms of pure SUI, only 5 had DI. In our series, only 39.1% (34/78) of patents with symptoms of OAB were shown to have DI, suggesting the poor predictability of urge symptoms for the diagnosis of DI based on urodynamic study. Identification of SUI at urodynamics (including ISD) were noted in 77.6% (198/255), which was almost corresponded with the rate (76.9 %) of positive urine leakage confirmed by the stress test. This result suggested that the (+) stress test seem to be an important determinant in predicting SUI on symptom-based approach.

Conclusions

In the women with symptoms of pure SUI, incidence of DI was low. Also, (+) stress test in women without OAB seem to be an important determinant in diagnosing SUI. Only one third of the women with coexisting ure symptoms had detrusor instability in urodynamic studies. Based on this result, it seemed to be inadequate to determine the treatment plan for mixed urinary incontinence based on symptoms only. Conclusively, if a patient had symptoms of pure SUI associated with (+) stress test, one may treat SUI without an urodynamic study. For the women with mixed UI, it may be better to undergo urodynamic study before launching definitive treatment.

Symptoms	(+) stress test (%)	Urodynamics		
		Detrusor instability	SUI	ISD
Total (n=255)	196 (76.9)	57(22.4)	85(33.3)	113(44.3)
Combined OAB(n=154)	113(73.4)	52(33.8)	47(30.5)	69(44.8)
Pure SUI(n=101)	83(82.2)	5(5)	38(37.6)	44(43.6)