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FEMALE LUTS RELATED TO URETHRAL INSTABILITY EVALUATED BY SYNCHRONOUS URETHROCYSTOMETRY

Hypothesis / aims of study
The aim of this study was to investigate the relationship between lower urinary tract symptoms (LUTS) and urethral instability (URI) in females by synchronous Urethrocystometry.

Study design, materials and methods
Eighty-nine female patients with LUTS underwent synchronous urethrocystometry. Free urine flow rate, voided urine volume, post-voiding residual (PVR), bladder pressure and urethra pressure were recorded simultaneously. URI with no detrusor overactive (DO) was defined as group A, URI with DO as group B, DO with no URI as group C, and the patients neither URI nor DO was included in group D. The parameters recorded in different groups were compared and their relationship to LUTS was analysed.

Results
URI was found in 56.2% (50/89) of patients who have higher incidence of stress urine incontinence (SUI), smaller maximum bladder capacity and functional urethral length than those without URI. For 29 patients complaining urgency during filling phase, 20.69%(6/29) wa found URI but no detrusor presser rise when it happen. Among 14 patients with dysuria 14.29% (2/14) showed intermittent voiding induced by urethral pressure increase in voiding phase

Table 1. The incidence of different symptoms in 4 groups

LUTS	group A	group B	group C	group D
OAB	11（29.73%）	8（61.54%）	2（22.22%）	8（26.67%）
SUI	24（64.86%）	10（76.92%）	4（44.44%）	10（33.33%）
dysuria	5（13.51%）	1（7.69%）	1（11.11%）	7（23.33%）

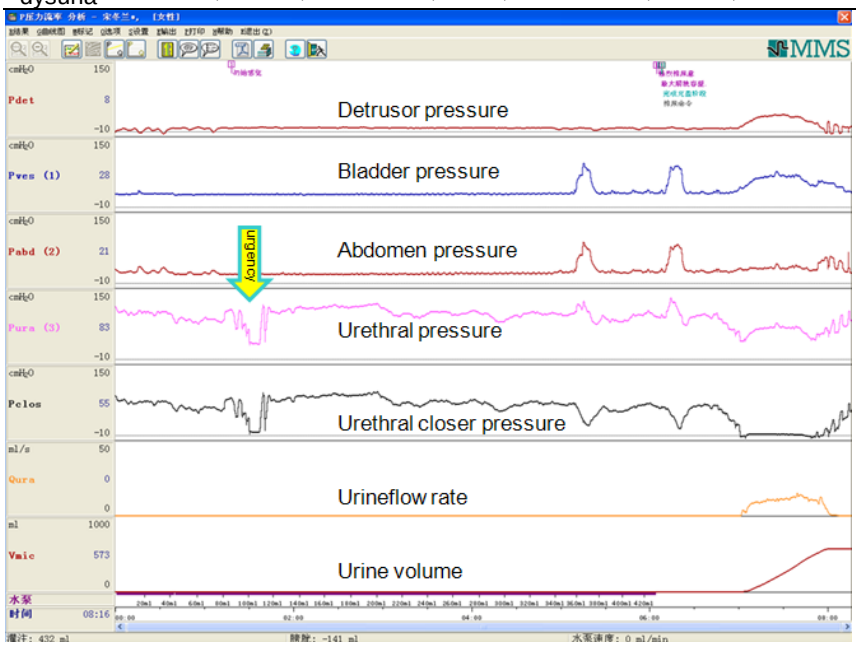

Figure 1. urgency caused by urethral instability

Female, 32y, complaining about urgency for more than 6 years. The arrow shows urgency caused by urethral instability

Interpretation of results
The decrease of urethral pressure may cause the feeling of urgency even urinary incontinence in filling phase without detrusor overactivity, which can also cause nocturnal enuresis when in sleep. On the contrary, the increase of urethral pressure can cause intermittent uroflow or dysuria in voiding phase.

Concluding message
LUTS is not only related to DO but also to URI. Synchronous urethrocystometry is an useful tool to diagnose URI.

Disclosures
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