AMBULATORY URODYNAMICS MONITORING SYSTEM FOR FEMALES WITH STRESS URINARY INCONTINENCE

Hypothesis / aims of study
We planned to compare the diagnostic accuracy of conventional urodynamic and ambulatory urodynamic (AUM) for the detection of females stress urinary incontinence (USI).

Study design, materials and methods
We prospectively enrolled 40 women with stress urinary incontinence and performed both urodynamic studies after they completed the ICI-Q-SF questionnaire. During AUM one micturition cycle was recorded. According to clinical symptoms, patients were divided into three groups of mild, moderate and severe. Half patients of each groups were performed conventional urodynamic, and other half of patients were performed AUM.

Results
There were no significant differences in all of the ICI-Q-SF Score between these two groups. 3 patients with stress urinary incontinence symptoms had no abnormal findings on the AUM and 15 patients had no abnormal findings on the conventional urodynamic (P <0.001). Among women with stress incontinence, 11 patients had USI on the AUM and 2 patients on the conventional urodynamic (P <0.001).

Interpretation of results

Concluding message
Our findings suggest that AUM done in a clinical setting during one micturition cycle with unstandardized provocative activities detects an underlying pathophysiology more often than conventional urodynamic in supine position. Conventional urodynamic has a higher false-negative rate in diagnosis of USI compared to ambulatory urodynamic.

Disclosures
Funding: no Clinical Trial: Yes Public Registry: Yes Registration Number: First Hospital Shanxi Medical University RCT: Yes Subjects: HUMAN Ethics Committee: First Hospital Shanxi Medical University Helsinki: Yes Informed Consent: Yes