

ARE THERE DIFFERENCES BETWEEN WOMEN WITH URGE PREDOMINANT AND STRESS PREDOMINANT MIXED URINARY INCONTINENCE?

Hypothesis / aims of study

We sought to determine if there are differences in clinical and urodynamic parameters between women with urge predominant and those with stress predominant mixed urinary incontinence (MUI). Identifying such differences may help to determine which component of the MUI is more problematic for the patient which could help guide management.

Study design, materials and methods

The charts of 99 female patients with complaints of MUI were reviewed. Patients were divided into 2 groups based on the subjective predominance of either stress incontinence (MSUI) or urge incontinence (MUUI). All patients completed a subjective evaluation including an AUA Symptom Index, Urogenital Distress Inventory (UDI-6), and Incontinence Impact Questionnaire (IIQ-7). Objective noninvasive measures included physical exam, 48-hour voiding diary, and a 24-hour pad test. Videourodynamics studies (VUDS), performed in all patients, were reviewed and the presence and characteristics of detrusor overactivity (DO) and stress incontinence were noted.

Results

There were no significant differences between groups with respect to symptom scores. When compared to MSUI patients, the MUUI cohort demonstrated significantly higher mean daily pad usage (4.4 vs 3.1, $p=0.02$), lower maximum (388mL vs 455mL, $p=0.01$) and average (158mL vs 206mL, $p=0.01$) voided volumes per void, lower urodynamic bladder capacities (271.6mL vs 463.5mL, $p<0.001$) and a higher rate of VUDS proven DO (70% vs 26%). Furthermore, the DO observed in MUUI patients occurred at lower bladder volumes (119.4mL vs 372.6mL, $p<0.001$) and with higher amplitude (37.6 cmH₂O vs 11.3 cmH₂O, $p=0.002$) than in patients complaining of MSUI. MSUI patients were more likely to have demonstrable SUI on physical examination (63% vs. 16%) and on VUDS (100% vs. 61%).

Interpretation of results

Our results suggest that patients with MUI are reliable when it comes to identifying the more bothersome component of their incontinence. MUUI patients appear to have clinical and urodynamic findings consistent with an overactive bladder population (e.g. smaller voided volumes on diary, higher incidence of urodynamic DO occurring at lower bladder volumes and with higher amplitude). MSUI patients, on the other hand, were more likely to have objective stress incontinence (SUI) both clinically and urodynamically consistent with a SUI population.

Concluding message

There do appear to be differences in clinical and urodynamic parameters between patients with stress predominant and urge predominant MUI. These may help to determine which component of the mixed incontinence is more problematic.

References

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HUMAN SUBJECTS: This study was approved by the Medical College of Wisconsin Institutional Review Board and followed the Declaration of Helsinki Informed consent was not obtained from the patients.