

PREOPERATIVE URODYNAMICS IN WOMEN WITH PURE STRESS URINARY INCONTINENCE: A STUDY FOLLOWING A RECENT RECOMMENDATION FROM NICE.

Hypothesis / aims of study

The National Institute for Health and Clinical Excellence (NICE) has recently published guidelines for management of urinary incontinence in women¹. The use of multi-channel cystometry was not routinely recommended in women with a clinical diagnosis of "pure" stress urinary incontinence (SUI). Some stakeholder groups are concerned that this recommendation was based on weak evidence. The aim of this study is to investigate the reliability of patient history of pure SUI in predicting urodynamic stress incontinence (USI) and in excluding other possible diagnoses.

Study design, materials and methods

Records of women aged 18-80 who underwent multi-channel cystometry between 1990-2006 were retrospectively analysed. Those with neurological symptoms or previous continence surgery were excluded from the study. Strict selection criteria were used to identify patients with pure SUI (without any symptoms suggestive of overactive bladder or voiding dysfunction). The symptomatic diagnosis of pure SUI was compared to the urodynamic diagnoses.

Results

Of the 7,011 records analysed, 324 (5%) women had the symptom of pure SUI. Despite the strict selection criteria, only 241 (74%) of these patients had a diagnosis of isolated USI. Detrusor overactivity (DO) was demonstrated in 44 (14%) patients (out of which, 15 were diagnosed with isolated DO). Urodynamic evidence of a voiding dysfunction was shown in 4 (1%) patients, while 35 (11%) were considered normal (no urodynamic abnormality). Table 1 demonstrates the accuracy of the symptom of SUI in predicting USI shown by the current study in comparison to the meta-analysis of NICE.

Table 1: Accuracy of the symptom of pure SUI in predicting USI:

	<i>Current Study</i>	<i>NICE Meta-analysis</i>
Sensitivity	11%	66% (17-83%)
Specificity	98%	83% (49-92%)
Positive Predictive Value (PPV)	74%	70% (41-95%)
Negative Predictive Value (NPV)	72%	69% (49-85%)

Interpretation of results

The low sensitivity and high specificity are probably due to the strict criteria in defining the symptom of pure SUI. The PPV indicates that in patients with pure SUI, there is a 26% chance of other urodynamic diagnoses. For those patients, the findings could mean a significant adverse effect on the outcome of subsequent continence surgery if multi-channel cystometry was not performed preoperatively.

Concluding message

Multi-channel cystometry may still be a necessary step in investigating patients with pure SUI prior to continence surgery.

References

1- The National Institute for Health and Clinical Excellence. The management of urinary incontinence in women. RCOG press, London, UK; 2006. (www.nice.org.uk/guidance/CG40/guidance/pdf/English/download.dsp)

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HUMAN SUBJECTS: This study did not need ethical approval because Retrospective database analysis and did not follow the Declaration of Helsinki - with approval by the ethics committee - in the sense that it was not needed. Informed consent was not obtained from the patients.