

URINARY INCONTINENCE SYMPTOMS APART FROM STRESS & URGENCY URINARY INCONTINENCE AND CORRELATION TO URODYNAMICS

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INTRODUCTION

Urinary incontinence (UI) is a common condition, affecting 16% of non-pregnant women over the age of 20 in the US¹. Among women between the ages of 25 and 84, 15% have complaints of stress urinary incontinence (SUI), and 13% have complaints of urgency urinary incontinence (UUI)². Many patients present with complex UI complaints, including insensible urine loss, post-micturition dribbling, nocturnal enuresis, or coital incontinence, as described by the International Urogynecological Association (IUGA)/International Continence Society (ICS) joint report on the terminology of urinary incontinence³.

OBJECTIVES

The objective of this study is to determine the correlation of UI symptoms beyond SUI and UUI to diagnoses made on urodynamic testing among women presenting with complaints of UI in a tertiary referral center.

The following symptoms were included:

- stress urinary incontinence (SUI)
- urgency urinary incontinence (UUI)
- insensible urine loss (IUL)
- nocturnal enuresis (NE)
- post-micturition dribbling (PMD)
- coital incontinence (CI)

METHODS

- This is a retrospective cross-sectional review of patients who presented to one provider in the Division of Urogynecology with complaints of UI between January, 2014 and August, 2016.
- 432 patients were included based on the complaint of UI at their first visit. The varying symptoms of UI were routinely asked and recorded
- Patients with multiple symptoms were included in each category they complained of.
- The data was obtained by 3 methods including manual chart review, search by ICD 9/10 codes, and search by completion of the International Consultation on Incontinence Questionnaire-Short Form (ICIQ-SF).
- The symptoms were then correlated by calculating Pearson correlations to diagnoses made on urodynamic testing, including urodynamic stress incontinence (USI) and detrusor overactivity (DO) by using logistic regression in SPSS (2015).
- Sensitivities, specificities, positive and negative predictive values (PPV, NPV) were also calculated.

RESULTS

- Mean patient age was 61, BMI 29 kg/m², and parity 2.

Table 1: Urinary incontinence symptoms by urodynamic diagnoses

	DO n (%)	OR (p value)	USI n (%)	OR (p value)	Both n (%)	Continent n (%)	Total n
UUI	121 (33.4)	4.5 (<0.01)*	45 (12.6)	1.9 (0.02)*	172 (48.2)	19 (5.3)	357
SUI	73 (23.7)	0.9 (0.6)	54 (17.5)	4.2 (<0.01)*	157 (51)	24 (7.8)	308
IUL	33 (27.7)	1.0 (0.9)	19 (16)	1.2. (0.4)	59 (49.6)	8 (6.7)	119
PMD	43 (30.7)	1.2 (0.5)	16 (11.4)	0.8. (0.3)	68 (48.6)	13 (9.3)	140
NE	31 (34.8)	1.5. (0.2)	13 (14.6)	1.1. (0.8)	44 (49.4)	1 (1.1)	89
CI	2 (15.4)	0.3 (0.07)	3 (23.1)	1.1 (0.9)	6 (46.2)	2 (15.4)	13

Table 2: Sensitivities, specificities, predictive values of SUI/UUI

	Symptoms	
	SUI	UUI
Sensitivity	82.4% (211/256)	88.8% (293/330)
Specificity	44.9% (79/176)	37.3% (38/102)
Positive predictive value	68.5% (211/308)	82.1% (293/357)
Negative predictive value	63.7% (79/124)	50.7% (38/75)

- Urinary incontinence in women is complex and may be characterized by several different subtypes.
- UUI correlates with DO as has been well established.
- The only other UI symptom associated with a urodynamic diagnosis is NE, which correlates with DO.
- SUI is a sensitive but not specific symptom in predicting a diagnosis of USI. UUI is a sensitive but not specific symptom in the diagnosis of DO.
- Predicting the underlying cause of UI based on patient history is unreliable.
- Urodynamics clarifies a diagnosis in such patients.

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