

WHAT DO WOMEN WITH LUTS CONSIDER AS NORMAL BLADDER FUNCTION?

Hypothesis / aims of study

The high prevalence of storage and voiding lower urinary tract symptoms (LUTS) in women is particularly troubling, given the negative impact on quality of life.¹ Understanding the burden of LUTS has important implications for public health and clinical practice. Various tools, like Patient Perception of Bladder Condition (PPBC), have been used in research and clinical practice to identify patients' perception of LUTS, which often differs from that of the clinicians'. Furthermore, evaluation of improvement with treatment is often based on what is considered clinically abnormal or bothersome, and these definitions might also differ among patients, clinicians and researchers.²

The aim of this study is to assess what patients with LUTS consider normal about their bladder function in accordance to International Continence Society (ICS) standardisation of terminology in lower urinary tract function.³

Study design, materials and methods

This is a population-based, cross-sectional questionnaire survey conducted in three tertiary referral urogynaecological centres in the U.K and Italy. A specially designed questionnaire to assess patients' perspective about their bladder function was distributed in both symptomatic and asymptomatic subjects for LUTS presenting in urogynaecology and general medicine clinics. The questionnaire was divided into three sections: the first one consisted of questions about demographics and level of education, the second one assessed index bladder symptomatology and the third comprised questions about what the patients considered normal with regards to frequency of micturition, nocturia, urgency, incontinence and frequency of urinary tract infection. Women were considered symptomatic if they had frequency of micturition ≥ 8 times a day, nocturia ≥ 1 at night, inability to defer desire to void for more than 10 minutes and ≥ 1 episode of leakage per week. Data analysis was performed with Kruskal-Wallis H test following confirmation of a non-normal data distribution with Q-Q plot test.

Results

Six-hundred and forty-one women were recruited across the three centres. The mean age \pm SD of the studied population was 48 ± 12 years. Two-hundred and thirty-eight patients (37%) were of higher educational status, whereas 403 patients (63%) had only completed a basic degree ($p < 0.001$). Tables 1-3 show the main results regarding patients' perception of normality of bladder condition among women with and without reported bladder symptoms.

		<3	4-7	8-10	11-12	>13	
frequency	symptomatic	6%	45%	37%	8%	4%	P<0.001
	asymptomatic	11%	64%	21%	2%	1%	

Table 1. Perception of normality of frequency of micturition (number of voids per day) among patients with and without reported increased frequency.

		<10	10-30	>30	
urgency	symptomatic	59%	30%	11%	P<0.001
	asymptomatic	26%	51%	23%	

Table 2. Perception of normality of urgency (minutes of deferment of voiding) among patients with and without symptoms of urgency.

		never	few drops	tea spoon	table spoon	large amount	
SUI	symptomatic	37%	42%	16%	4%	1%	P<0.001
	asymptomatic	74%	20%	3%	2%	0%	
UUI	symptomatic	49%	42%	9%	0%	0%	P<0.001
	asymptomatic	68%	29%	2%	1%	0%	

Table 3. Perception of normality of quantity of leakage among women with and without reported stress urinary incontinence and urge urinary incontinence.

Interpretation of results

There are significant differences in the perception of normality of frequency, urgency and amount of leakage between women with and without lower urinary tract symptoms. These differences reflect on the various impact of bladder dysfunction on patients' quality of life and seem to be independent of their social and educational status.

Concluding message

Understanding what women with and without LUTS consider as normal bladder condition could enhance clinicians' comprehension of abnormal bladder function and help set realistic goals for individualised treatment of such challenging and often debilitating condition.

References

1. BJU Int. 2009 Aug;104(3):352-60
2. BJU Int. 2008 Jun; 101(11):1381-7
3. Urology.2003 Jan;61(1):37-49

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