

STRAINING TO VOID IS ASSOCIATED WITH FEMALE DYSPAREUNIA

Hypothesis / aims of study

Female lower urinary tract symptoms (LUTS) affect quality of life and sexual activity. This study aimed to evaluate the influences of LUTS on dyspareunia (pain during vaginal penetration) in Japanese women, as little is known on this topic.

Study design, materials and methods

The study population comprised 369 women who participated in 2-day health examinations at a single institution in Fukui, Japan, from April 2010 to March 2011.

All participants were asked to complete a standardized self-reported questionnaire. Using the International Prostate Symptom Score (IPSS), IPSS-QOL score, and the International Consultation on Incontinence Questionnaire-Short Form (ICIQ-SF), we evaluated urinary symptoms, including urinary incontinence, urgency, daytime frequency, straining, and nocturia.

To assess dyspareunia, we asked the question "Over the past 4 weeks, how often did you experience discomfort or pain during vaginal penetration?", with answer choices of "Did not attempt intercourse", "Almost always or always", "Most times", "Sometimes", "A few times", and "Almost never or never", from part of a questionnaire from the Japanese translation of the Female Sexual Function Index (Question 17 of FSFI-J) [1].

We analyzed relationships between dyspareunia and LUTS. The Mann-Whitney U test and logistic regression models were used for statistical analyses. Values of $P < 0.05$ were considered statistically significant.

Results

A total of 315 individuals completed the questionnaire (response rate, 84%). The mean age of respondents was 47.2 years (range, 31-69 years).

Our analysis included 125 women (40%), and excluded 190 women (60%) who reported that they had not attempted intercourse over the past 4 weeks. Among sexually active women, 44% had experienced dyspareunia.

Straining to void and IPSS-QOL score were significantly higher in women reporting dyspareunia (Fig. 1). In multivariate analysis, significant correlations were found between dyspareunia and both straining to void and IPSS-QOL score (Table).

Interpretation of results

Straining to void and IPSS-QOL score correlated significantly with dyspareunia among Japanese women in this study. The underlying mechanism remains unclear, and little data have been accumulated on the association between straining to void and dyspareunia, although a previous study reported LUTS as a predictor of sexual pain for women in the United States (odds ratio = 7.61) [2]. A small number of studies have found that overactive bladder is also highly associated with female sexual dysfunction [3].

Our study could not clarify which other domains of sexual function (sexual activity, dyspareunia, libido, arousal/lubrication, and orgasm) correlated with LUTS including straining to void, and further research on this issue is required.

Concluding message

Our study confirmed straining to void and IPSS-QOL score as factors independently associated with dyspareunia. These results suggest that straining to void can offer a predictor of female dyspareunia.

Figure. Urinary symptoms and Dyspareunia

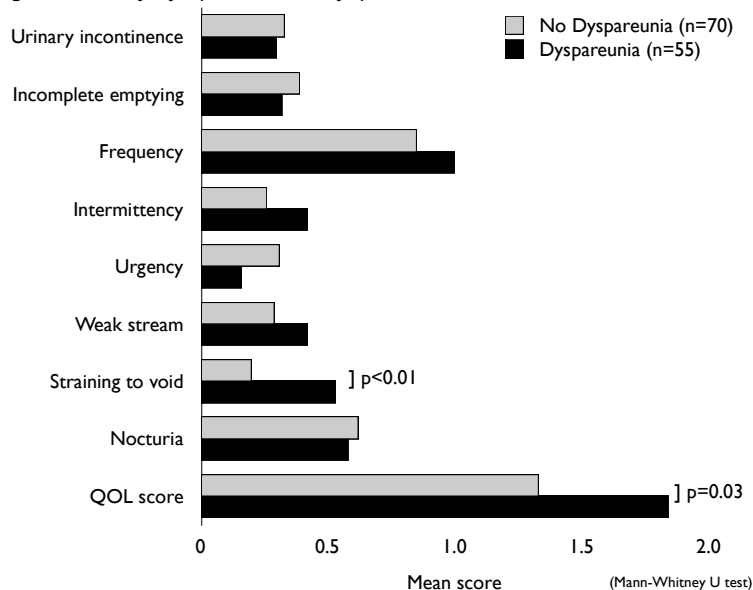


Table. Multivariate analysis of the association between dyspareunia and urinary symptoms.

	Odds ratio	95% CI	p-value
Age	1.01	0.95-1.07	0.70
Urinary incontinence	0.82	0.31-2.20	0.70
IPSS			
Incomplete emptying	0.53	0.15-1.82	0.31
Frequency	1.19	0.65-2.20	0.58
Intermittency	1.35	0.33-5.58	0.68
Urgency	0.48	0.17-1.39	0.18
Weak stream	0.29	0.06-1.41	0.13
Straining to void	16.9	1.38-205	0.03
Nocturia	0.50	0.23-1.09	0.08
QOL score	1.88	1.07-3.09	0.03

References

1. Rosen. J Sex Marital Ther, 26:191, 2000
2. Laumann. JAMA. 281:537, 1999
3. Kim. Int J Impot Res, 17:158, 2005

Disclosures

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