

Comparisons of Health Related Quality of Life between Overactive Bladder-wet and -dry Women Based on Bladder Diary

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ABSTRACT

Hypothesis / aims of study

Overactive bladder syndrome (OAB) has great negative impact on health related quality of life. In literatures, few studies reported the comparisons of health related quality of life between OAB-wet and OAB-dry female patients. Thus, our aim is to compare the clinical variables and health related quality of life between OAB-wet and OAB-dry women.

METHODS

Between July 2009 and January 2018, all women with OAB visiting a medical center for evaluation were reviewed. The classification of OAB-wet or OAB-dry is based on the record of three-day bladder diary of each patient. The diagnosis of OAB in each patient was based on the presence of at least one episode of urgency in her three-day bladder diary and with absence of stress urinary incontinence. The presence of at least one episode of urgency associated incontinence was defined to be OAB-wet, otherwise, OAB-dry. Besides, only female OAB patients with available King's Health Questionnaire (KHQ) data were reviewed in this study.

CONCLUSIONS

Women with OAB-wet have a poorer health related quality of life, especially in the domain of severity measures. In addition, women with OAB-wet have higher severity of nocturnal enuresis and stress incontinence, despite less voiding difficulty.

RESULTS

A total of 905 OAB women with available KHQ data were reviewed, including 172 (19.0%) OAB-wet and 733 (81.0%) OAB-dry women were included in this study.

The mean age and parity is higher in the OAB-wet group, compared with OAB-dry. Women with OAB-wet had higher scores of Overactive Bladder Symptoms Scores (OABSS) and Urgency Severity Scales (USS), as well as urgency, urgency incontinence and severity measures scores, compared with OAB-dry (Table 1).

Besides, women with OAB-wet also had higher scores of stress incontinence, nocturnal enuresis and lower scores of voiding difficulty and personal relationships (Table 1)

Interpretation of results

OAB-wet seems to be a severe form of OAB with the finding of higher severity of OABSS, USS, urgency and urgency incontinence. Despite less negative impact on personal relationships, women with OAB-wet had a poorer quality of life, especially for severity measures, compared with OAB-dry. Besides, OAB-wet women had a higher severity of nocturnal enuresis and stress incontinence, despite less voiding difficulty.

Table 1. Comparisons of clinical variables and health related quality of life between OAB-wet and OAB-dry women (n = 905)

Variables	OAB-dry (n = 733)	OAB-wet (n = 172)	P†	Coefficient of OAB-wet‡	P‡
Age	57.7±13.	62.7±13.5	<0.001	-	-
Parity	2.4±1.4	2.9±1.4	<0.001	-	-
OABSS	6.8±2.8	8.9±3.2	<0.001	1.9 (1.4, 2.4)	<0.001
USS	1.9±1.0	2.3±1.1	<0.001	0.4 (0.2, 0.5)	<0.001
Frequency (0~4)	2.5±1.1	2.6±1.0	0.35	0.1 (-0.1, 0.3)	0.21
Nocturia (0~4)	2.4±1.1	2.4±1.1	0.49	-0.1 (-0.3, 0.1)	0.39
Urgency (0~4)	2.1±1.2	2.5±1.1	<0.001	0.3 (0.1, 0.5)	0.001
Urgency Incontinence (0~4)	1.4±1.2	2.5±1.0	<0.001	1.1 (0.9, 1.3)	<0.001
Stress Incontinence (0~4)	1.7±1.3	2.2±1.3	<0.001	0.5 (0.3, 0.7)	<0.001
Nocturnal enuresis (0~4)	0.48±0.71	0.84±1.11	0.001	0.34 (0.21, 0.48)	<0.001
Intercourse incontinence (0~4)	0.46±0.76	0.49±0.81	0.99	0.08 (-0.05, 0.21)	0.23
Waterworks infections (0~4)	1.3±1.3	1.3±1.4	0.58	0.0 (-0.2, 0.2)	0.96
Bladder pain (0~4)	1.1±1.2	1.0±1.1	0.11	-0.2 (-0.4, 0.0)	0.11
Voiding difficulty (0~4)	1.4±1.3	1.2±1.2	0.08	-0.2 (-0.4, -0.0)	0.046
General health perception (0~100)	51.8±20.8	53.5±20.3	0.26	1.9 (-1.6, 5.4)	0.28
Incontinence impact (0~100)	48.8±31.2	48.3±30.2	0.97	0.2 (-5.0, 5.4)	0.95
Role limitations (0~100)	40.4±30.8	43.7±29.3	0.14	2.7 (-2.4, 7.9)	0.30
Physical limitations (0~100)	44.5±31.0	48.6±31.3	0.09	3.3 (-1.9, 8.6)	0.22
Social limitations (0~100)	27.4±28.1	28.8±26.0	0.27	0.3 (-4.3, 5.0)	0.89
Personal relationships (0~100)	24.3±31.9	16.1±23.4	0.09	-7.4 (-14.2, -0.5)	0.04
Emotions (0~100)	38.4±30.2	39.2±27.1	0.34	0.9 (-4.1, 5.9)	0.72
Sleep/Energy (0~100)	45.7±29.0	45.8±27.6	0.82	0.9 (-4.0, 5.7)	0.73
Severity measures (0~100)	27.4±23.0	43.4±25.6	<0.001	15.8 (11.9, 19.8)	<0.001

Data are presented mean ± standard deviation.

OABSS = Overactive Bladder Symptoms Scores. USS = Urgency Severity Scales.

†Wilcoxon rank-sum test.

‡The coefficient of OAB-wet was adjusted by age and parity with multivariate linear regression analysis.