

IDENTIFICATION OF EACH THRESHOLD OF FOUR OAB-SYMPTOMS SEVERITY TO IMPACT SIGNIFICANTLY ON QOL SUGGESTED BY THE VISUAL ANALOGUE SCALE TO EVALUATE QOL OR BOTHER SPECIFIC TO EACH SYMPTOM

Hypothesis / aims of study

Overactive bladder (OAB) has a multi-dimensional impact on quality of life (QOL). However, the standard symptom score questionnaire for OAB, such as OABSS [1], is aiming to question the severity of four OAB-specific symptoms (Q1; frequency, Q2; nocturia, Q3; urgency, and Q4; incontinence) but not to assess the QOL (or bother) specific to each of these 4 OAB-symptoms. We have reported the clinical significance of our developed novel assessment tool to evaluate the QOL (or bother) specific to each of the 4 OABSS-questions with visual analogue scale (VAS) of a 100-mm line, which was integrated into the OABSS and called OABSS-VAS (Figure 1) [2]. Aim of this study was to identify each threshold of the 4 OABSS-questions to impact significantly on patient's QOL (or bother) suggested by the OABSS-VAS.

Study design, materials and methods

We analysed total of consecutive 500 female patients who visited our clinic from 2012 to 2016 and answered both OABSS (Q1; 0 to 2, Q2; 0 to 3, Q3; 0 to 5, Q4; 0 to 5) and OABSS-VAS (0 to 100 in each 100-mm line specific to Q1-4) questionnaire at the same time. The median age of the patients was 69 (22-94) y.o. In order to identify the significant impact on QOL, we defined greater than 60-mm as the threshold for the VAS-measure.

Results

The outcome of the relationship between OABSS-VAS and each OABSS were demonstrated in Figure 2.

As for daytime frequency (OABSS-Q1), the value of OABSS-VAS for OABSS-Q1 score of 0 (less than 7times), 1 (8-14 times), and 2 (more than 15 times) were 38.2 ± 26.5 (n=131), 61.4 ± 26.4 (n=316), and 76.9 ± 20.0 (n=53), respectively. As a result, the score of 1 (8-14 times) was identified as the significant severity for daytime frequency.

As for nocturia (OABSS-Q2), the value of OABSS-VAS for OABSS-Q2 of 0, 1, 2, and 3 were 13.0 ± 19.1 (n=81), 38.4 ± 25.4 (n=131), 61.0 ± 24.2 (n=136), and 80.0 ± 17.7 (n=152), respectively. As a result, the score of 2 (2 times) was identified as the significant severity for nocturia.

As for urgency (OABSS-Q3), the value of OABSS-VAS for OABSS-Q3 of 0 (none), 1 (less than once a week), 2 (more than once a week), 3 (once a day), 4 (2-4times a day), and 5 (more than 5 times a day) were 24.7 ± 25.4 (n=91), 46.2 ± 25.4 (n=86), 69.7 ± 20.4 (n=66), 70.5 ± 17.8 (n=94), 80.1 ± 19.9 (n=114), and 90.0 ± 11.9 (n=49), respectively. As a result, the score of 3 (once a day) was identified as the significant severity for urgency.

As for urinary urge incontinence, UUI (OABSS-Q4), the value of OABSS-VAS for OABSS-Q4 of 0 (none), 1 (less than once a week), 2 (more than once a week), 3 (once a day), 4 (2-4times a day), and 5 (more than 5 times a day) were 26.5 ± 27.5 (n=163), 64.9 ± 27.5 (n=83), 74.9 ± 20.2 (n=63), 80.4 ± 20.6 (n=75), 88.0 ± 12.8 (n=90), and 91.3 ± 11.4 (n=26), respectively. As a result, the score of 1 (not zero) was identified as the significant severity for UUI.

Interpretation of results

Our study clearly demonstrated the each concrete threshold of the 4 OAB-symptom severity to impact significantly on patient's QOL (or bother). It is demonstrated that the OAB-patients' QOL could be significantly disturbed when urge incontinence exists that is "if not zero", and also when urgency occurs "even once a day", and also that the threshold of daytime frequency to impact significantly on patients' QOL was identified 8-14 times and that of nocturia was 2 times. These data would contribute to appropriate selection of the therapeutic target-symptom with significant severity to impact on patients' specific QOL or bother. Our results supports that concomitant use of both OABSS and OABSS-VAS. Concomitant use of both symptom-severity-score (OABSS) and symptom-specific-QOL-measure (OABSS-VAS) would contribute to identify the patient's specific significant symptom which each patient wants to be treated most or which has most significant impact on their QOL or bother.

Concluding message

Concomitant use of both OABSS and OABSS-VAS identified each concrete threshold of the 4 OAB-symptom severity to impact significantly on patient's QOL (or bother).

Concomitant use of both OABSS and OABSS-VAS would contribute to identify the patient's specific significant symptom which has most significant impact on their QOL or bother.

Figure 1

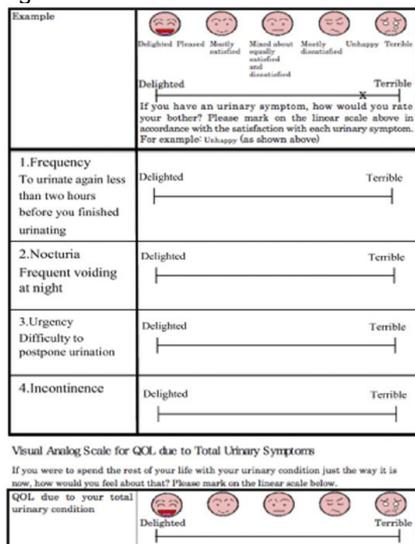
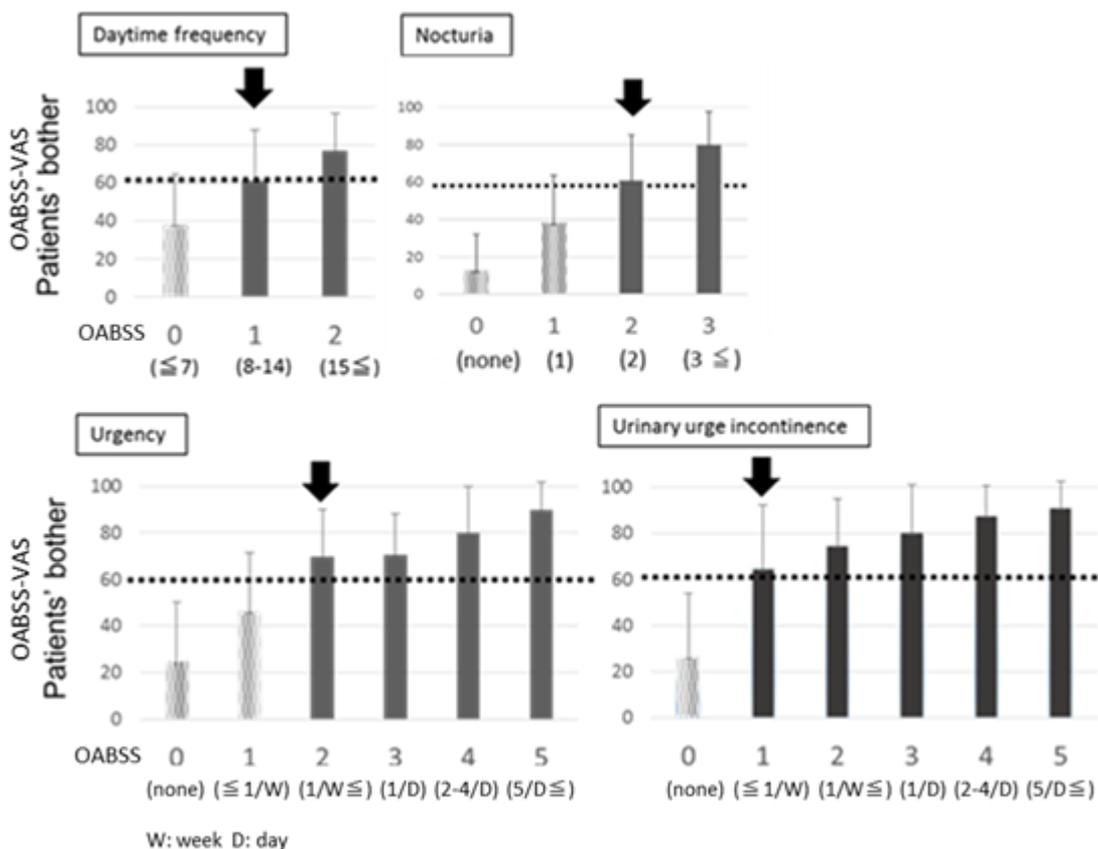


Figure 2

The threshold of OABSS score to impact on symptoms specific QOL suggested by VAS questionnaire (black arrows indicate the threshold)



References

1. Homma Y, et al Urology 68: 318, 2006
2. Fujihara A, et al. J Urol 189, 1797, 2012

Disclosures

Funding: none **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Ethics Committee of Kyoto prefectural university of medicine **Helsinki:** Yes **Informed Consent:** Yes