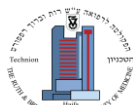


# Obstructive Voiding Symptoms in Patients with

## Overactive Bladder Syndrome



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### HYPOTHESIS

The International Continence Society (ICS) (1) has characterized Lower Urinary Tract Symptoms (LUTS) into storage, voiding, post-micturition and pelvic organ prolapse symptoms. Overactive bladder syndrome (OAB) is considered to be a bladder storage syndrome. However, many patients also complain of obstructive voiding symptoms (OVS) such as incomplete bladder emptying, slow urine stream, hesitancy or the need for repeated voiding.

Our objectives were to characterize OVS in patients diagnosed with OAB and assess their impact on patients' symptoms and QoL.

1. 5th International Consultation on Incontinence, 2013.

### MATERIALS AND METHODS

This was a prospective study in which all women aged 30-90 years visiting our outpatient urogynecologic clinic and diagnosed with OAB between November 2016 and January 2017, were asked to fill the Obstructive VOiding Symptoms (OVOS) questionnaire (Table I). This questionnaire was designed specifically for this study and consisted of 14 statements regarding OVS. Patients were asked to rate their agreement to each statement on a 5-point Likert scale. In addition, all women were asked to fill the Urogenital Distress Inventory -6 (UDI-6) and Incontinence Impact Questionnaire -7 (IIQ-7). The questions 'How much has your sexual life been affected by urinary incontinence?' and 'What is the overall negative impact of urinary incontinence on your QoL?' were added as well. Statistical analysis was performed to determine the prevalence of each OVS and its correlation to OAB severity and impact on patients' QoL. Patients with advanced pelvic organ prolapse, pelvic irradiation or urinary retention (residual volume >100cc) were excluded from the study.

Table I - Obstructive VOiding Symptoms (OVOS) Questionnaire

No.	Statement
1.	I often feel lower abdominal pain
2.	I often feel that I am unable to empty my bladder completely
3.	I often feel hesitancy at the beginning of urination
4.	I often use my abdominal muscles in order to urinate
5.	I often lean forward or change position in order to urinate
6.	My urine stream is often interrupted
7.	I often feel that my urine stream is deviated to the side
8.	I often feel that I have a slow urine stream
9.	I often feel a sensation of fullness immediately after I empty my bladder
10.	I often need to return to the bathroom within 15 minutes from a previous urination
11.	I often have an involuntary urine leakage after the end of urination
12.	I often have a burning sensation while urinating
13.	I often press my lower abdomen in order to empty my bladder
14.	I often need to press at any point of my labia or vagina in order to empty my bladder

### RESULTS

- Thirty-eight women enrolled in the study with a high (95%) response rate. The OVOS questionnaire was found to have good reliability with Cronbach's alpha of 0.75.
- Thirty-six (95%) women reported having at least one OVS, while 34 (90%) had at least two, and 31 (82%) had at least 3 OVS.
- The most significant statements with a median score of 3 or higher were:
  - 'I feel that I am unable to empty my bladder completely'
  - 'I feel a sensation of fullness immediately after I empty my bladder'
  - 'I often need to return to the bathroom within 15 minutes from a previous urination'.
- Women rated the last two statements as being the most significant of all other statements.
- The statement: 'I feel that I am unable to empty my bladder completely' significantly correlated with the feeling of frustration, ( $r=0.44$ ,  $p=0.006$ ), as well as with the overall negative impact of urinary incontinence on QoL ( $r=0.36$ ,  $p=0.03$ ).
- The statement: 'I feel a sensation of fullness immediately after I empty my bladder' significantly correlated with the total impact of urinary incontinence on sexual function ( $r=0.42$ ,  $p=0.031$ ).

### INTERPETATION OF RESULTS

These results indicate that patients with OAB tend to have OVS without having objective evidence for urinary retention. These symptoms can be assessed by the OVOS questionnaire which was found to have good reliability and construct validity. Some OVS seem to correlate well with UDI-6 and IIQ-7 questionnaires, suggesting that they may play a role in the clinical picture of OAB and may have additional impact on patients' QoL, and sexual function apart from the classical storage symptoms.

### CONCLUDING MESSAGE

OVS are common in patients with OAB and may be considered as potential targets for both behavioural and medical therapy for this syndrome.