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## BACKGROUND

- ✓ Bladder dysfunction may lead to urogenital symptoms that may have a significant impact on a patient's quality of life.
- ✓ Overactive bladder is one of the most disturbing symptoms and it can be present in approximately 60 to 80% of patients diagnosed with Multiple Sclerosis (MS).
- ✓ Correlation between the degree of spinal cord involvement and severity of symptoms has been described in MS. However, the association between Neuromyelitis Optica Spectrum Disorder (NMOSD) and overactive bladder has not been completely described, leading to unawareness and lack of treatment of this associated comorbidity.

## OBJECTIVE

- ✓ Determine and compare the prevalence of patient self-reported overactive bladder related symptoms in subjects with NMOSD and MS to increase awareness of this comorbidity among providers.

## METHODS

- ✓ Descriptive, questionnaire based cross-sectional study.
- ✓ A total of 35 patients with NMOSD and MS were enrolled in each group.
- ✓ The Overactive Bladder Assessment Questionnaire (OAB-8) was administered during patient follow-up clinic visit.
- ✓ Demographic data and Expanded Disability Status Scale (EDSS) score were obtained.

## RESULTS

**Figure 1:** Overactive Bladder Assessment Questionnaire (OAB-8)

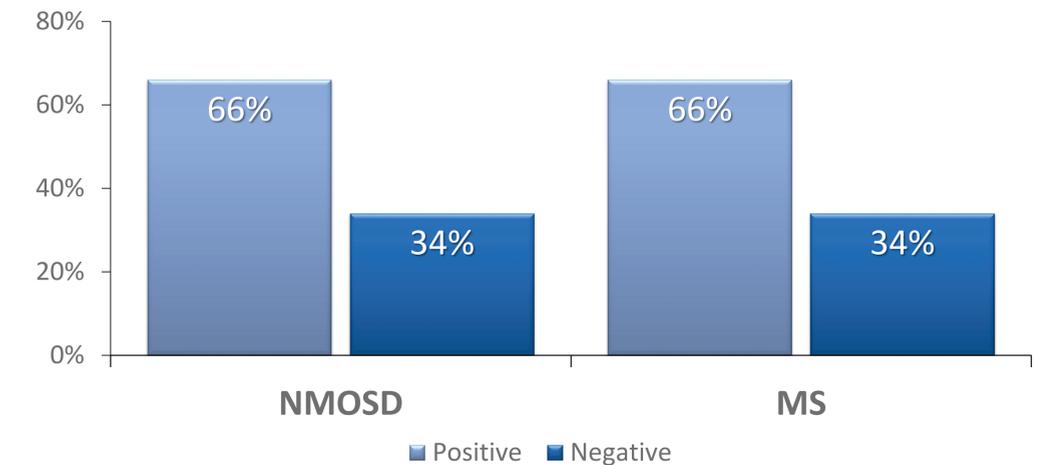
How bothered have you been by...	Not at all	A little bit	Some-what	Quite a bit	A great deal	A very great deal
1. Frequent urination during the daytime hours?	0	1	2	3	4	5
2. An uncomfortable urge to urinate?	0	1	2	3	4	5
3. A sudden urge to urinate with little or no warning?	0	1	2	3	4	5
4. Accidental lost of small amounts of urine?	0	1	2	3	4	5
5. Nighttime urination?	0	1	2	3	4	5
6. Waking up at night because you had to urinate?	0	1	2	3	4	5
7. An uncontrollable urge to urinate?	0	1	2	3	4	5
8. Urine loss associated with a strong desire to urinate?	0	1	2	3	4	5
Are you a male?	If male, <input type="checkbox"/> add 2 points to your score					

**Table 1:** Subject Characteristics

Variable	NMOSD (n=35)	MS (n=35)
Age, years (mean, SD)	48 ± 12	47 ± 11
Female (%)	91	82
Time from initial symptoms, years (mean, SD)	8 ± 6	10 ± 6
Expanded Disability Status Scale (mean, SD)	4 ± 2	2 ± 1
Subjects on disease modifying therapy (%)	97	97

- ✓ We enrolled seventy percent (70%) of the NMOSD patients followed at our clinic.

**Figure 2:** Comparison between questionnaire results in NMOSD versus MS



A positive questionnaire is a score higher than 8.

- ✓ The NMOSD group showed higher disability score, as per Expanded Disability Status Scale (EDSS) ( $p < 0.05$ ).
- ✓ However, there were no differences in questionnaire scores among groups (NMOSD mean score =  $13 \pm 9$ , MS mean score =  $12 \pm 8$ ;  $p = 0.5$ )
- ✓ The highest score in the NMOSD group was 33 while the highest core in MS was 31.

## CONCLUSIONS

- ✓ There is a similar prevalence of patient self-reported overactive bladder symptoms in NMOSD and MS.
- ✓ Overactive bladder is one of the most disturbing symptoms and can have significant impact on the quality of life of patients with demyelinating diseases.
- ✓ OAB Assessment Tool may be a useful screening questionnaire for early detection in patients with NMSOD.

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