PREVALENCE OF STRESS URINARY INCONTINENCE IN WOMEN WITH MULTIPLE SCLEROSIS

Hypothesis / aims of study
Data from the 2005 North American Research Committee on Multiple Sclerosis (NARCOMS) survey of 9,702 MS patients reported responses to the Urogenital Distress Inventory (UDI-6) [1]. According to the survey, 58% of women with MS reported some degree of urinary leakage with physical activity. This prevalence data has not been confirmed in a contemporary cohort. The purpose of this study was to determine the prevalence of stress urinary incontinence (SUI) in women with multiple sclerosis (MS) and to what degree these women are bothered by their SUI, since there is a paucity of literature regarding the nature of SUI in this unique population of women.

Study design, materials and methods
We conducted a prospective IRB approved study to determine the prevalence of SUI in women with MS. Women scheduled for outpatient follow-up appointments at a dedicated MS center were asked to complete a questionnaire regarding urinary incontinence. Urgency urinary incontinence (UUI) and SUI were defined as an answer of slightly, moderately or greatly to UDI-6 question #2 and question #3, respectively. Impact of SUI on physical activity was determined by Incontinence Impact Questionnaire (IIQ-7) question #2.

Results
A total of 55.9 % women had SUI, 70.6% women had UUI, and 44.8% women had mixed urinary incontinence. The mean age was 45.8 years old (range 20-72). Women with SUI were significantly older (mean 47.2 vs. 41.9, p=0.023) and there was a trend towards a greater BMI (mean 29.3vs 26.5, p=0.057). Women with SUI had significantly higher IIQ-7 scores compared to women without SUI (p<0.001). Impact of urinary incontinence on physical activity was also found to be significantly greater in women with SUI (mean IIQ question #2 0.96 vs. 0.35, p<0.001).

Interpretation of results
The prevalence of SUI in women with MS is 55.9%, which is consistent with the SUI prevalence data captured in the 2005 NARCOMS survey, and the presence of SUI has a significant impact on their quality of life [1]. While just over half of women with MS and SUI indicated that they are not significantly bothered by their SUI, nearly one third reported a significant impact on their physical activity.

Concluding message
Women with MS may benefit from treatment of their SUI and screening for SUI should not be overshadowed by assessment and treatment of OAB.

Table 1: Comparison of patient characteristics with patients stratified by presence or absence of SUI

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>SUI</th>
<th>No SUI</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>47.2 yo</td>
<td>41.9 yo</td>
<td>0.023</td>
</tr>
<tr>
<td>BMI</td>
<td>29.3 kg/m²</td>
<td>26.5 kg/m²</td>
<td>0.057</td>
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<tr>
<td>Vaginal deliveries</td>
<td>1.35</td>
<td>1.19</td>
<td>0.514</td>
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<tr>
<td>Total IIQ-7</td>
<td>6.81</td>
<td>2.48</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>IIQ-7 Question #2</td>
<td>0.96</td>
<td>0.35</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

All values represent means

References

Disclosures
Funding: None Clinical Trial: No Subjects: HUMAN Ethics Committee: Cleveland Clinic Institutional Review Board (IRB) Helsinki: Yes Informed Consent: No