(P20) VALIDATION OF THE PERFORMANCE SCALES SPASTICITY SUBSCALE

R. Marrie,1 D. Stough,2 F. Bethoux2

1Internal Medicine, University of Manitoba, Winnipeg, Manitoba, Canada; 2Mellen Center for MS Treatment and Research, Cleveland Clinic, Cleveland, OH

Background: The North American Research Committee on Multiple Sclerosis (NARCOMS) Registry is a self-report registry for patients with multiple sclerosis (MS). NARCOMS participants report spasticity using one question (subscale) from Performance Scales (PS), which has not been validated independent of the other PS subscales. Objectives: We aimed to assess the criterion and construct validity of the Performance Scales Spasticity (PSS) subscale and the responsiveness of the subscale. Methods: We recruited patients attending routine visits for spasticity management with stable neurologic status at least 3 months prior to enrollment. We assessed the criterion validity of the spasticity subscale by comparing it with a physician-scored Modified Ashworth Scale (MAS) using Spearman rank correlations with casewise deletion. To assess construct validity, we correlated the PSS with age, pain (NARCOMS pain question), and PS subscales for mobility and vision. A subset of participants agreed to a second visit, where they underwent the same evaluation as at the initial visit. Among these participants, we examined the correlations between changes in the mean MAS score and changes in the spasticity score between the first and second visits. Results: Forty patients completed a single study visit, including 31 (77.5%) women, with a mean (SD) age of 50.2 (11.6) years and median (interquartile range [IQR]) EDSS score of 6.5 (5.8–6.8). The median (IQR) PSS score was 3 (2–4). The PSS subscale correlated with the mean MAS score ($r = 0.46$, $P = .003$). Correlations between the PSS subscale and age ($r = −0.17$, $P = .29$) and vision ($r = 0.03$, $P = .86$) were low, indicating divergent validity. Correlations with pain ($r = 0.39$, $P = .04$) and mobility ($r = 0.24$, $P = .16$) were moderate, suggesting convergent validity. Eleven patients completed a second visit. The correlation between the changes in the PSS scores and mean MAS scores was 0.57 ($P = .07$). Conclusions: The PSS subscale has adequate criterion and construct validity in MS. A larger sample will be needed to assess the responsiveness of the subscale; data collection is ongoing.

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