Depression and High Expanded Disability Status Scale (EDSS) are independent predictors of sexual dysfunction in Multiple Sclerosis patients: analysis from a cross-sectional study.

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INTRODUCTION AND OBJECTIVES

Multiple Sclerosis (MS) is a chronic disease that has a negative impact on sexually active adults. However, changing in sexual function can arise at any time during the course of MS, and its prevalence varies between 50% and 90%. Changes in sensation in the genital region and thighs, dryness in the vagina or reduced lubrication and difficulty to reach orgasm are most frequently observed dysfunctions. The aim of this study was to evaluate the relationship between sexual function and urodynamic patterns in patients with MS. Finally, we also aimed to evaluate the role impact depression and anxiety on sexual function.

METHODS

A consecutive sample of 108 patients with multiple sclerosis, who underwent first urodynamic, was recruited from January 2011 to September 2013 from the MS outpatient clinic. Criteria for inclusion were: diagnosis of MS according to the McDonald Revised criteria and a “stable sexual relationship”, defined as the presence of the same partners for six or more consecutive months. Indication for urodynamics was defined as follows: frequency ≥7 micturitions per day or ≥1 during the night, urgency to void and/or urinary incontinence. Depression and anxiety were evaluated with the Hamilton Depression Scale (HAM-D) and the Hamilton Anxiety Scale (HAM-A). Sexual function was assessed with the Female Sexual Function Index (FSFI) or the International Index of Erectile Function short form (IIEF-5). For all statistical comparisons significance was considered as p <0.05.

RESULTS

Of all subjects, 50 (46.3%) were female and 58 (53.7%) were male. Median age was 46.50, median duration of MS was 156 months, median of the Expanded Disability Status Scale (EDSS) was 4.25, median of HAM-A was 12, median of HAM-D was 13, median IIEF-5 was 12, median IPSS was 20.5 and median FSFI was 15.5. Twelve (11.1%) patients had Primary Progressive (PP) MS, 22 (20.4%) had Secondary Progressive (SP) MS and 74 (68.5%) had Relapsing-Remittent (RR) MS. After urodynamics examination, in 68 (63%) were diagnosed Detrusor Overactivity (DO). We found that patients with high EDSS (5-8) had lower IIEF-5 (9.0 vs. 13.5; p<0.01) and FSFI (9.9 vs. 17.1; p<0.01) than those with low EDSS (0-4) and that Female patients with DO had lower FSFI (11.7 vs. 16.9; p<0.01). At the correlation analysis, we demonstrated inverse association between HAM-A and IIEF-5, FSFI, and between HAM-D and IIEF-5 and FSFI. At the multivariate logistic regression analysis, HAM-D and EDSS were independent predictors of severe ED (IIEF-5≤11), while only EDSS was independent predictor of female sexual dysfunction (FSFI<26.55) after adjusting for age and MS variants.

CONCLUSIONS

The findings of the current study confirmed the significant relationship between sexual dysfunction and disability in MS patients. Although the underlined mechanisms have not been evaluated, it can be supposed that depression and disability, as measured as EDSS, and moreover neurological alterations, secondary to MS, could impair sexual function. We suggest to consider depression and disability as significant factors of sexual dysfunction in multiple sclerosis patients, suggesting the need for further attention in this disease.