Quality of Life evaluation of women with Multiple Sclerosis with and without Lower Urinary Tract Symptoms

Hypothesis / aims of study: Lower urinary tract symptoms (LUTS) are highly prevalent in Multiple Sclerosis (MS), occur in up to 90% of these patients throughout the course of the disease and urgency, with or without urge incontinence, usually with frequency and nocturia are the most common symptoms. Although these symptoms are not life threatening they are responsible for a significant negative impact on the Quality of Life (QoL) of affected patients. The most commonly used instrument to assess QoL in MS population is the Medical Outcomes Study Short-Form 36 (SF-36), however, it has been recommended to be supplemented with specific QoL tools. This prospective trial aimed at investigating the QoL in women with MS with and without LUTS.

Study design, materials and methods: Fifty one women with MS and LUTS (GI) and fifty women also with MS but with no LUTS (GII) were assessed with the following questionnaires: Medical Outcomes Study Short-Form 36 (SF-36) and General Quality of Life (GQoL) domain of Qualiveen questionnaire. The disease specific questionnaires ICIQ-SF and Specific Impact of Urinary Problems on Quality of Life (SIUP) domain of Qualiveen were assessed only in those women with LUTS. The questionnaires were filled out by the patients but, if necessary, the assistance of the physiotherapist, responsible for the study, was allowed.

Results: Demographic and clinical data were calculated by the Mann-Whitney test and there were no significant differences between groups. The results observed in SF-36 evaluation in both groups are shown in Figure 1 and the results observed in GQoL domain of Qualiveen in GI and GII are shown in Figure 2. In the disease specific questionnaires the LUTS complaints women showed a median of 11 (range: 0 to 19) in the ICIQ-SF evaluation and a median of 1.82 (range: 0.18 to 2.98) in SIUP domain of Qualiveen.

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**Figure 1** – Median of the scores of SF-36 questionnaire.
Interpretation of Results – The assessment of SF-36 in both groups showed low scores of most of domains, as reported by previous studies of QoL in Multiple Sclerosis using the same scale. Several studies have shown that MS patients have lower QoL when compared to non-MS population (1), that explains the importance of identifying specific problems that contribute to this reduction in QoL. GI showed lower scores on physical function, role physical and role emotional domains of SF-36 than GII this is explained by the fact that bladder dysfunction is directly related to pyramidal impairment (2). Patients with MS and LUTS have lower general QoL than those MS patients without LUTS as observed in our study where patients of GII showed better results in GQoL domain of Qualiveen questionnaire than GI. Furthermore, the high scores of ICIQ-SF and low scores of SIUP domain of Qualiveen empathise the negative impact that urinary problems cause in QoL in MS patients with LUTS, as stated by previous studies (3).

Concluding message – QoL is reduced in women with MS. The presence of LUTS contributes to a negative impact on QoL of these women.

References