Multiple Sclerosis: Sustaining Care, Seeking a Cure
June 2-5, 2010 * San Antonio, Texas

(S85) POSTVOID RESIDUAL EVALUATION IN MULTIPLE SCLEROSIS PATIENTS
M. Lopes de Carvalho,1  G. Brichetto,1  R. Motta,1  M. Battaglia1,2

1AISM Rehabilitation Centre, Multiple Sclerosis Italian Foundation, Genova, Italy; 2Institute of Hygiene, University of Siena, Siena, Italy

Background: Over 80% of multiple sclerosis (MS) patients have symptoms of lower urinary dysfunction during the disease course, and 96% of patients with MS with more than 10 years of disease complain of a urinary symptom. One of the most common symptoms is retention, which is usually not perceived by the person. Comprehensive evaluation is essential for MS specialists to effectively manage these potentially life-disrupting symptoms. Objectives: This study is designed to identify MS patients with retention who are followed at home by the rehabilitation service and to evaluate the correlation between symptoms and postvoid residual (PVR). Methods: We studied 509 MS patients with Bladder Scan followed at home by the AISM Rehabilitation Centre. The following data were recorded: age, disease duration, Expanded Disability Status Scale (EDSS) score, symptoms (with a standardized questionnaire), current bladder management (therapy, aids), number of urinary tract infections in the last year, and urologic investigations. All data were analyzed with descriptive analysis, multifactorial analysis, and linear regression analysis. Results: Of 509 subjects, 352 were female (69.2%), while 157 were male (30.8%). Based on the urinary symptoms questionnaire, patients were divided into asymptomatic (55 subjects; 10.8%) and symptomatic (454 subjects; 89.2%) groups. The mean ± SD PVR for both groups was 131.38 ± 130.73 mL. The mean PVR for the asymptomatic group was 78.81 ± 97.93 mL, while in the symptomatic group it was 137.67 ± 132.81 mL. PVR analysis showed a high prevalence of PVR >100 mL in the whole MS population (symtomatic and asymptomatic groups). Statistical analysis showed no statistically significant correlation between all parameters considered and PVR with the exception of the retention symptom. Linear correlation showed a significant correlation between EDSS score and PVR. Conclusions: The results showed that about 90% of the MS population included in the study experienced bladder problems during the course of the disease. The high prevalence of PVR >100 mL in MS subjects underlined the importance of detecting bladder disturbances at an early stage of the disease in order to protect and preserve renal function. Lack of correlations between urinary symptoms and PVR and the high prevalence of urinary disorders suggest that the Bladder Scan should be used routinely as a screening device to detect retention in all MS subjects.

Supported by: Astra Tech

Disclosure: Nothing to disclose

Keywords: nursing management in MS, rehabilitation strategies and therapy and MS