P0458 - Exploring the polypharmacy phenomenon in newly diagnosed Relapsing Remitting Multiple Sclerosis (ID 1283)

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Abstract

Background
Polypharmacy adds many variables in the relapsing-remitting Multiple Sclerosis (RRMS) therapeutic algorithms. The choice of first Disease-Modifying Therapy (DMT) should also take into account the presence of concomitant medical illnesses and the use of other medications that can expose patients to adverse drug reactions, and drug-drug or drug-disease interactions.

Objectives
To examine the frequency of polypharmacy in a large cohort of patients at the time of RRMS diagnosis and to explore its effects on disease course after three years from the beginning of the first DMT assessed by the score no evidence of disease activity (NEDA-3).

Methods
We enrolled RRMS patients starting their first DMT between January 1st, 2013 and December 31st, 2015. According to the number of medicines prescribed (except DMTs) we divided patients in three groups: no-Poly-RRMS, minor-Poly-RRMS (from one to three medications) and major Poly-RRMS (>3 medications).

Results
392 RRMS patients were enrolled (mean age 41.1). Minor-Poly-RRMS were 61 (15.6%) and major-Poly-RRMS were 112 (28.6%). Minor and major-poly-RRMS were older (p=0.00) and with higher median Body Mass Index (BMI)(p=0.00) than no-poly-RRMS patients.

At multivariate regression analysis, higher age at onset was associated with minor and major-poly-RRMS (OR 1.050, CI 1.0-1.2, p=.015 and OR 1.063, CI 1.0-1.1, respectively). BMI was associated with major poly-RRMS (OR 1.186, CI 1.18-1.29, p=.000). Polypharmacy was not associated with disease activity after three years.

Conclusions
In our cohort of newly diagnosed RRMS, polypharmacy was associated with older age and higher BMI at the time of diagnosis. Polypharmacy represents an emerging challenge in medical management in the worldwide population, especially in the elderly.