

A LONGITUDINAL STUDY OF THE PSYCHOLOGICAL WELL-BEING AFTER A DIAGNOSIS OF MULTIPLE SCLEROSIS

Dalla Costa G¹, Leocani L¹, La Porta ML¹, Martinis M, Roselli L¹, Zabalza A², Guerrero A², Nos C², Buron M³, Magyari M³, Sorensen P³, Montalban X², Dobson R⁴, Cummins N⁴, Hotopf M⁴, Comi G¹ on behalf of the RADAR-CNS Consortium

¹ San Raffaele University, Milan, Italy

² Multiple Sclerosis Centre of Catalonia (Cemcat), Department of Neurology/Neuroimmunology, Hospital Universitari Vall d'Hebron, Universitat Autònoma de Barcelona, Barcelona, Spain.

³ Danish Multiple Sclerosis Centre, Department of Neurology, Copenhagen University Hospital Rigshospitalet, Copenhagen, Denmark.

⁴ King's College London, London, UK.

Introduction: After the diagnosis of Multiple Sclerosis (MS), depressive symptoms are frequent and directly linked to reduced quality of life. Despite all this formal assessment of behavioral/affective disturbance in clinical practice is infrequent. The aim of the current study was to explore if the diagnosis of MS affects the psychological wellbeing of the patients.

Methods: RADAR-CNS MS depression study is an observational study that aims to evaluate if multi-parametric RMT represent a reliable and feasible instrument to better identify and characterize mood changes in newly diagnosed MS patients. Patients within a year since the diagnosis of MS have been recruited. Baseline, 3 and 6 months questionnaires on depression (concerning the following items IDS-SR, CIDI-SF, BDI-II), as well as socio-demographic, anxiety, fatigue, disability and cognitive functioning data have been collected. A latent Markov model has been used to evaluate longitudinal patterns of mood disturbances in the cohort of patients.

Results: A total of 95 patients (57% females, mean age of 37.4 years, SD 10.3) have been recruited in the study. A LM model with four latent states corresponding to increasing severity of depressive symptoms was selected on the basis of the BIC. Mild to moderate depressive symptoms were present in 40% of patients at baseline, while 53% of patients had no mood changes after the diagnosis of the disease. Transitions towards clusters characterized by mild symptoms were likely in the follow-up, particularly for females and patients with high cognitive performances. Parenthood and high incomes were associated with high probabilities of maintaining the same latent state in the follow-up.

Conclusions: Depressive symptoms are common after the diagnosis of MS. The patients' baseline status as well as their individual adaptation responses are significantly influenced by sex, parenthood and cognitive performances. Remote monitoring technologies proved to have the

potential to overcome the limits of standard clinical practice by offering granular assessments of patients' clinical and psychological condition.