P2662

PREDICT FACTORS OF QUALITY OF LIFE IN MS PORTUGUESE PATIENTS

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Background: Multiple sclerosis (MS) is a common chronic neurological disease in young adults, with a modest effect on life expectancy, but a broad spectrum of consequences, of variable severity, on physical and psychological characteristics. The objective of this study is to identify predictors of Quality of Life (QoL) in benign and not benign patients.

Patients and methods: The Hospital Anxiety and Depression Scale (HADS) and Functional Assessment of Multiple Sclerosis (FAMS) were administered to 159 MS patients with disease duration at least 10 years. "Benign" MS (BMS) (54) defined as EDSS ≤ 3 [42 women; mean (sd): age=41.87y (9.56), education=11.69y (4.88), disease duration=15.02y (5.38), EDSS=1.84 (0.97), MSSS=1.53 (1.09), MMSE = 28.91 (1.09)] and 105 non-Benign MS (NBMS) defined as EDSS >3 [61 women; age=47.03y (9.44), education=10.35y (4.82), disease duration=18.73y (7.88), EDSS=5.35 (1.38), MSSS=5.39 (1.93), MMSE =27.56 (2.55)]. Chi-squared tests were used to perform comparisons between groups on sex and professional status, independent-samples t-tests on age and MSSS and Mann-Whitney on disease duration, EDSS, HADS, Nine-Hole peg test, MMSE. ANCOVA was used to assess the effect of these variables on QoL, evaluated by a FAMS total score in both groups.

Results: The ANCOVA results showed that, controlling for socio-demographic and clinical variables, QoL index was predicted by anxiety (BMS: F=4.39, p=0.045; NBMS: F=12.704, p=0.001) and depression (F=32.374, p<0.001; F=14.422, p<0.001) symptoms.

Conclusions: The present study confirmed psychiatric symptoms are strongest predictors of QoL in MS patients. Multidisciplinary treatment, including physical, psychological, and social needs of patients should improve QoL in most MS cases.

P2663

NEUROMYELITIS OPTICA, ANTIBODIES TO WATER ION CHANNELS AND VISUALIZATION OF PATHOLOGIC PROCESS

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Neuromyelitis optica (NMO) is a condition characterized by selective involvement of the spinal cord and optic nerves, and by frequent relapses. Many clinical, laboratory and neuroimaging studies helped to distinguish NMO from MS, especially the one of initiating MS form - retrobulbar neuritis. The presence of aquaporin-4 (AQP4) antibodies (AB) has broadened the spectrum of pathogenetic mechanisms of this disorder, which being inflammatory also seems to have many typical autoimmune characteristics. On the same time, exact concentration of AQP4 AB and accurate localization of pathological autoimmune and inflammatory process within CNS still remained questionable. The aim of our research was to study AQP4 AB in serum and cerebrospinal liquor (CSL) of 27 NMO patients. Control group consists of 45 relatively healthy donors without any chronic neurological condition, treated because of some surgical diseases, including inguinal hernia removal, where spinal anaesthesia and CSL after lumbar puncture was possible to obtain. We employed ELISA and Western blot for AQP4 AB evaluation. For pathologic process visualization we performed brain MRI in all patients and non-neurological donors. It was found that level of this AB were increased in 21 patients (80%) and only in 8 (17%) donors. 11 out of 17 patients (64.7%) had abnormal MRI findings. Most patients manifested with more than two lesions. Cerebral white matter was most frequently involved in 59%. 18% with corpus callosum, 24% with internal capsule, 12% with cerebellum, and 17% with brainstem. Our results showed also some correlation between AQP4 AB levels and CNS structure involvement.