

COGNITIVE IMPAIRMENT IN A COHORT OF GREEK MULTIPLE SCLEROSIS PATIENTS

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Cognitive impairment is a common phenomenon in multiple sclerosis (MS), occurring at all stages of the disease, even at the earliest, and can be a major source of disability, social impairment, and impoverished quality of life. Cognitive dysfunction is mainly focused on working memory, conceptual reasoning, verbal fluency, speed of information processing, attention and executive function. Additional clinical factors, including disease course, fatigue and affective disturbance, can impact the degree of MS-related cognitive impairment.

We examined prospectively, during 30 month period, 40 patients suffering from definite MS, according to I. McDonald et al. (2007) criteria and 20 healthy individuals. We selected those MS patients who were in remission for at least one year. MS patients who received high dose of corticosteroids during the investigation as well as those who demonstrated severe emotional disturbances were excluded from the final estimation. A total of 20 non-neurologically impaired participants, matched for gender, age, marital status, occupation and education, formed a control group. Both the patients and the controls were examined every six months clinically and were administered the Mini-Mental State Examination (MMSE) and a comprehensive battery of neuropsychological tests.

Most of the patients of the present study revealed mild cognitive impairment with mild influence on the everyday function. We found weak correlation between cognitive deficit and the duration of MS, as well as the physical disability status and moderate correlation between cognitive impairment and the type of the disease as well as MRI findings (atrophy and lesion load).

Cognitive impairment in MS seems to be not simply the result of tissue destruction, but also a balance between tissue destruction, tissue repair and adaptive functional reorganization. These findings highlight the need to screen for cognitive deficits in MS patients to conduct potential cognitive rehabilitation intervention.