J Neurol Neurosci 2019, Volume 10
DOI: 10.21767/2171-6625-C2-024

Multiple sclerosis cognitive impairment mimicking Alzheimer's disease: neurodegenerative hypothesis

Monireh Eslami[1], **Mehdi Moghaddasi M**[1,2] and **Nafiseh Mohebi**[3]
[1]Corresponding author, Assistant of Neurology, Rasool Akram Hospital, Iran University of Medical Sciences, Tehran, Iran
[2]Associate Prof. of Neurology, Rasool Akram Hospital, Iran University of Medical Sciences, Tehran, Iran
[3]Assistant Prof. of Neurology, Rasool Akram Hospital, Iran University of Medical Sciences, Tehran, Iran

Recent studies propose that multiple sclerosis (MS) is not only a demyelinating disorder but a primary degenerative disease accompanied with whole brain atrophy. Brain atrophy, indeed, might happen without any clinical attacks or magnetic resolution imaging (MRI) new T2 lesions even early in the disease. Furthermore, brain atrophy plays a prognostic role in the conversion of clinically isolated syndrome (CIS) to MS or MS progression. Although brain volumetry in MS is important, it's using has not been familiar with our clinic practice. Here in, we present a 24-year-old, bachelor graduate female diagnosed with relapsing-remitting MS (RRMS) for three years, complaining of memory disturbance. On physical examination, she had Expanded Disability Status Scale (EDSS) of 1. Neuropsychological test including mini-mental status examination (MMSE), Montreal cognition assessment (Moca) and Addenbrooke's cognitive test was in normal range. But brief international cognitive assessment of multiple sclerosis (BICAMS) revealed impairment in two parts of test. The stunning finding is her drawing test in Addenbrooke's cognitive test and Rey Osterrieth Complex Figure, has a similar simplification and errors of perspective that seen in Alzheimer's disease at her age. Cognitive impairment can be overlooked in MS patients especially early in the disease or might be quite different from what is expected, as in our patient. It is assumed that a comprehensive psychological test is required to evaluate variable domains of cognition in MS patients. Consequently, appropriate case selection can be made for brain volumetric MRI.

monireh.eslami.85@gmail.com