

## Cognitive decline and Treatment strategies in Multiple Sclerosis patients

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### Abstract:

Multiple Sclerosis (MS) is the most common demyelinating disease of the Central Nervous System (CNS) in young adults with a variety of CNS-related symptoms. The prevalence of cognitive decline in MS patients has been reported to lie from 13% to 72% 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. We still have not found the neuroanatomical basis and the pathogenesis of the cognitive decline in MS, and, thus we are still unable to predict the patients who are more likely to manifest such decline and at what stage of the disease. Clinical factors, including disease course, fatigue and affective disturbance, can impact the degree of MS-related cognitive impairment. According to the literature, 20% to 42% of the MS patients demonstrate a significant deficit in recognizing and recalling verbal and visual memories, either at the onset of the disease or at its later stages, whereas short-term memory remains almost intact. Many patients also demonstrate deficits in complex attention, slower efficiency in information processing, declined ability of problem solving, planning, and prioritization tasks or even visual agnosia and aphasia than healthy controls. Most of MS specific disease modifying treatments seem to improve MS attacks and progression, however, their specific impact on cognitive impairment remains unclear. Evaluation of cognitive functions should be incorporated in the regular assessment and monitoring of MS patients since they seem to be well correlated with the progression



of the disease. Specific treatment strategies should be implemented although they still remain very much limited especially due to the validations and standardization of both the diagnostic and therapeutic tools for the MS related cognitive disorders.

### Biography:

Koutsouraki is an Assistant Professor of Neurology at Aristotle University of Thessaloniki, AHEPA Hospital, Greece. She is the Chair of Out-patient clinic for MS patients, for cerebellar ataxia and Laboratory of neuroimmunology of 1st Department of Neurology Scholar of Bodosakeio Institute, Vardinogiannio Institute and Greek Institute of Fellowships

### Recent Publications:

1. Effrosyni Koutsouraki, et al Virol J 2020.
2. Effrosyni Koutsouraki, et al J Int Med Res 2019.
3. Effrosyni Koutsouraki, et al Clin Chem Lab Med 2019