

# KORSAKOFF SYNDROME IN A PATIENT WITH MULTIPLE SCLEROSIS

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## Abstract

A 46-year-old woman presented with acute onset diplopia, ophthalmoparesis, confusion and gait instability. She had a positive history for probable Multiple Sclerosis (MS), depression and alcohol use. During the hospitalization she progressively developed cognitive problems. Confabulation was the most prominent. She underwent imaging and laboratory testing including thiamine levels which resulted lower than the normal levels. The brain imaging showed demyelinating like lesions, her EEG showed diffuse arrhythmias and her CSF was normal. She was supplemented with vitamin B1 and eye movement was restored within 48 hours.

Extended neuropsychological testing revealed disorientation in time and place, a severe amnesic syndrome both on verbal and non-verbal tasks, borderline performance in the phonemic fluency, extremely low performance in the semantic fluency and in the tasks of attention and processing speed. During executive functions testing the patient exhibited perseverance, inability to form abstract concepts as well as to shift and maintain set and to utilize feedback. Intellectual testing placed her at the low average. Patient produced autobiographical confabulations in response to questioning and had anosognosia. Visual naming and word repetition was intact, as well as speech articulation and comprehension.

Overall, neuropsychiatric manifestations can be part of the clinical spectrum of MS. To our knowledge this is a rare occurrence of Korsakoff Syndrome with MS. It could be speculated that the inflammatory process in the MS brain, when combined with alcohol use, could exacerbate a Korsakoff-like cognitive profile, which so far is atypical for classical MS.