

Cognition and Affect in Possible Serial Autoimmune Episodes of Anti-NMDA-Receptor EncephalitisZengqiu Zhou¹ • Lisa Koehl, PhD² • Sid Kapoor, MD² • Dan Han, PhD²

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¹University of Kentucky • ²Neurology, University of Kentucky

Background: Anti-NMDAR encephalitis is characterized by acute neuropsychiatric symptoms, attributable to ovarian teratomas and subsequent autoimmune processes in about half of its cases. Imaging correlates are often unremarkable and patients recover well after appropriate treatment. However, post-treatment recovery is poorly defined in the literature.

Purpose/Hypothesis: Identify a unique clinical picture of probable repeat autoimmune episodes and their clinical sequelae in a patient with Anti-NMDAR encephalitis.

Method/Case study: A 33-year-old woman underwent 1 probable and 1 confirmed bouts of autoimmune encephalitic episodes. The first occurred at age 24 with headaches, hallucinations, violent outbursts, seizures, then coma. Following high dose Prednisone, she recovered with mild to moderate residual deficits. Nine years later, a more severe episode occurred involving 4 status epilepticus and coma. Treatment included IVIG, plasmapheresis, and salpingo-oophorectomy. She was later switched to rituximab infusion and managed for psychosis and seizures. Laboratory findings revealed anti-NMDAR encephalitis sans teratoma. 4 months follow up included psychometric testing and the Personality Assessment Inventory.

Results: On the Personality Assessment Inventory for measuring current affect and personality, critical items included endorsement of thought broadcasting, multiple personalities, others reading (her) thoughts, and auditory hallucinations. In addition, depression and anxiety levels were elevated.

Conclusion: While the literature establishes positive treatment efficacy of anti-NMDAR encephalitis, the level of post-treatment recovery remains poorly defined. This case revealed residual psychiatric symptoms s/p primary treatment modalities such as IVIG and plasmapheresis. While the patient recovered well after treatment from a bedside picture, further assessment revealed residual psychiatric symptoms, highlighting the necessity of further defining the recovery picture in this population.