NEJM Journal Watch

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Recovery of Cognitive Functioning in Anti-NMDA Receptor Encephalitis

Improvements were gradual and persisted for several years.

Few studies describe the long-term cognitive dysfunction experienced by people with anti–*N*-methyl-D-aspartate receptor (anti-NMDAR) encephalitis. In the current prospective, longitudinal study, investigators evaluated 40 adults with anti-NMDAR encephalitis at two consecutive visits, the first at a median of 2.3 years after symptoms onset, and the second at a median of 4.9 years after onset.

At the first visit, all patients had cognitive deficits, which were severe in 50%, moderate in 35%, and mild in 15%. The most prevalent abnormalities were executive function, working memory, and verbal memory. At the second visit, all patients showed improvement; overall, 30% had severe cognitive impairment, 35% moderate impairment, 27.5% mild, and 7.5% were fully recovered. Improvements were seen across all cognitive domains. Predictors of cognitive impairment included treatment delay, longer hospitalization time, greater severity of acute disease, intensive care unit admission, and older age at onset.

COMMENT

While recovery from a number of neurologic diseases seems to peak within 6 months and plateau over 12 months, anti-NMDAR encephalitis is associated with a more prolonged recovery. This study highlights how impactful this disease remains long after patients return from their acute and rehab hospital stays. Patients should be counseled that improvement can take multiple years, and a long-term approach to cognitive therapy should be adopted.

— Robert T. Naismith, MD

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At the time we reviewed this paper, its publisher noted that it was not in final form and that subsequent changes might be made.