Dr. Dash has nothing to disclose. Dr. Shetty has nothing to disclose. Dr. Kulkarni has nothing to disclose. Dr. Mushtaq Shah has nothing to disclose. Dr. Philip has nothing to disclose.

Long-Term Psychiatric Symptoms in Autoimmune Encephalitis Remission

Ramy Gabarin, Julien Hébert, Seth Climans, Alexandra Muccilli, Sydney Lee, Gregory Day, Richard Wennberg, David Tang-Wai

Objective

To identify the prevalence of self-reported symptoms of depression and anxiety among patients in remission from autoimmune encephalitis (AE).

Background

Although prior studies have found a high prevalence of residual cognitive deficits among patients in remission from AE, there is a paucity of data on long-term psychiatric outcomes for this patient population. In normal populations, median Patient Health Questionaire-9 (PHQ9) and General Anxiety Disorder-7 (GAD7) scores were reported to be, respectively, around 3 and 2, with prevalence of depressive and anxiety symptoms on these questionnaires reported as around 24% and 23%.

Design/Methods

Retrospective cross-sectional cohort study at a tertiary center AE clinic between 2012-01-01 and 2021-12-31. Patients were contacted via phone or regular follow-up and completed the PHQ9 and GAD7.

Results

Forty-one patients were contacted; 29 responded (71%) and were included. Seventeen (59%) were female. Median age was 32.5 years (range 5-77). Autoantibody results were N-methyl-D-aspartate receptor (n = 14, 48%), negative (n = 7, 24%), leucine-rich glioma-inactivated 1 (n = 6, 21%), and contactin-associated protein-like 2 (n = 1, 3%). Median time from disease onset to questionnaire collection was 6.3 years (range 1.5-23.0). Ten patients (37%) were experiencing symptoms of depression as measured by the PHQ9, with six (60%) reporting moderate-to-severe symptoms. Median PHQ9 score was 3 (range 0-18). Six patients (22%) were experiencing symptoms of anxiety on the GAD7, with one (17%) reporting moderate-to-severe symptoms. Median GAD7 score was 2 (range 0-10). Eight patients (28%) reported a psychiatric history prior to the onset of AE, which was associated with increased PHQ9 scores ($p = 0.04$, Wilcoxon rank sum test).

Conclusions

The prevalence of self-reported depressive and anxious symptoms in this cohort in remission from AE was similar to general populations. Patients with a psychiatric history that preceded onset of AE had higher PHQ9 scores. These results may be affected by censoring bias and lower sensitivity of self-reported diagnostic tools.

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The Clinical Response of California Serogroup Virus Neuroinvasive Disease in a Pediatric Patient to Intravenous Immunoglobulin (IVIG) Therapy

Avni Sanghi, Grace Gombolay, Tuba Khan

Objective

NA.

Background

California serogroup (CSG) viruses are commonly associated with neurologic disease. There are few cases of CSG viruses where IVIG has been proven to help. We report a young child with neuroinvasive CSG virus encephalitis treated with IVIG and associated outcome.

Design/Methods

A retrospective chart review.

Results

A 6 year old boy, previously healthy presented with fluctuating mental status with vomiting, fatigue, and fever starting six days prior to presentation. He began to have repetitive movements of rubbing his nose, and twisting movements of the upper extremities with mild eye deviation to the left with no EEG correlate. He required PICU admission for desaturations and altered mental status requiring intubation with sedation. He was found to have positive serum IgG and IgM antibody titers 1:128 of CSG viruses. IgG and IgM antibody titers of CSG viruses was negative (<1:1) in CSF. Of note he was positive for human metapneumovirus IgM antibodies. His serum and CSF NMDA was negative suggesting California encephalitis is not likely associated with NMDA encephalitis. His MRI brain resulted with extensive diffusion restriction throughout the frontal, parietal, and temporal cortex as well as non-diffusion restricting signal abnormality involving the basal ganglia and brainstem, suggesting a parainfectious encephalitis. He received IVIG given his worsening mental status starting on day 14 of admission. Neurological symptoms gradually improved after IVIG treatment. Despite therapies he displayed difficulties with focus and attention. 6 months after initial presentation his routine EEG showed frequent, sleep activated, 1-3 seconds bursts of irregular generalized spikes-and-slow wave complexes. Patient was continued on levetiracetam with no seizures.

Conclusions

This report highlights a severe case of encephalitis with CSG viruses. Although it is not clear whether time or IVIG helped in this patient case, it seemed to have shortened his acute altered mental status although he still has long-term learning difficulties.

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