

Anti-NMDA-receptor antibody in initial diagnosis of mood disorder

初期診断が気分障害であった患者における抗 NMDA 受容体抗体保有率の検討

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Anti-N-methyl D-aspartate receptor (NMDAR) encephalitis has been increasingly recognized as one etiology of psychiatric symptoms, but there is not enough evidence on patients with mood disorder. We assayed anti-NR1/NR2B IgG antibodies in serum and/or cerebrospinal fluid of 62 patients initially diagnosed with mood disorder by a cell-based assay. We also investigated the specific patient characteristics and psychotic symptoms. At first admission, the patients showed only psychiatric symptoms without typical neurological signs or abnormal examination findings. Four of the 62 patients had anti-NR1/NR2B IgG antibodies. The anti-NR1/NR2B IgG antibody-positive patients showed more super- or abnormal sensitivity ($P = 0.00088$), catatonia ($P = 0.049$), and more conceptual disorganization ($P < 0.0001$), hostility ($P = 0.0010$), suspiciousness ($P < 0.0001$), and less emotional withdrawal ($P < 0.0001$) and motor retardation ($P < 0.0001$) on the Brief Psychiatric Rating Scale than the antibody-negative patients. During the clinical course, anti-NR1/NR2B IgG antibody-positive patients showed more catatonia ($P = 0.0042$) and met Graus' s criteria for diagnosis of anti-NMDAR encephalitis, but negative patients did not. For treatment, immunotherapy was effective for anti-NR1/NR2B IgG antibody-positive patients, and there was the weak relationship ($R^2 = 0.318$) between the anti-NR1/NR2B IgG antibody titer in the cerebrospinal fluid and the Brief Psychiatric Rating Scale score. Identification of anti-NR1/NR2B IgG antibodies in CSF is important for diagnosis of anti-NMDAR encephalitis of patients with an initially suspected mood disorder, especially those whose clinical course is not typical.