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**[Acute limbic encephalitis and NMDA type-glutamate receptor].**

[Article in Japanese]

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**Abstract**

We compared clinical characteristics and autoantibodies against GluRepsilon2 between 95 patients with nonparaneoplastic non-herpetic acute limbic encephalitis (NPNHALE) and 19 patients with non-herpetic acute encephalitis accompanying ovarian teratoma (NHAE-OT). Onset age (mean +/- SD) was 27.7 +/- 18.6 years old in NPNHALE, 27.5 +/- 6.5 in NHALE-OT. Preceding factors were found in 63.8% of patients with NPNHALE and 89.5% of patients with NHALE-OT (Fisher's exact test, p = 0.025), and major preceding factors were upper respiratory infections or fever in both groups. Symptoms at the onset were disorder of behavior and talk > seizures > impairment of consciousness in NPNHALE, and disorder of behavior and talk > seizures > disorientation in NHALE-OT. Symptoms at the acute stage were similar between NPNHALE and NHAE-OT, but duration of hospital stay was longer in NHAE-OT (209.0 days) than NPNHALE (87.5 days) (Mann Whitney test, p<0.0001). At the onset, cell counts in CSF were 51.6 +/- 66.4/mm3 and protein levels were 35.4 +/- 14.7 mg/dl, and IgG levels were 6.6 +/- 4.2 mg/dl in NHAE-OT, and these data were not significantly different between NPNHALE and NHAE-OT. In acute stage, autoantibodies against whole molecule of GluRepsilon2 in CSF were detected in 51.8% (29/56) of adult NPNHALE, and 40% (6/15) of NHAE-OT patients by immunoblot. These autoantibodies in both groups included epitopes to n-terminal of GluRepsilon2. Antibodies against NMDAR complex (Dalmau's method) in CSF were detected in 90.9% (10/11) of NHAE-OT patients.