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**[Subacute encephalitis associated with anti-glutamate receptor antibodies: serial studies of MRI, 1H-MRS and SPECT].**

[Article in Japanese]

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**Abstract**

A 32-year-old man who had experienced fever and a pulsating headache of the right occipital region for a month and a transient left hemianopia and numbness in the left arm two weeks prior to presentation was admitted to our hospital because of a seizure. Fluid-attenuated inversion recovery and diffusion-weighted magnetic resonance imaging (MRI) showed high-intensity signals, without reduction of apparent diffusion coefficient value, in the right temporo-occipital cortices. Proton MR spectroscopy (1H-MRS) indicated a decrease in N-acetylaspartate, and single-photon emission CT (SPECT) showed hyperperfusion in the right temporo-occipital territory. An examination of the cerebrospinal fluid showed an elevation of mononuclear cells and the presence of anti-glutamate epsilon2 receptor antibodies. All abnormalities shown by these imaging techniques were normalized in the clinical course. This report suggests that MRI, 1H-MRS and SPECT studies were useful in understanding the pathogenesis of encephalitis associated with glutamate receptor antibodies.