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【 PICTURES IN CLINICAL MEDICINE 】

Striatal Encephalitis in Neuropsychiatric Systemic Lupus Erythematosus

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Key words: neuropsychiatric systemic lupus erythematosus, NPSLE, striatal encephalitis

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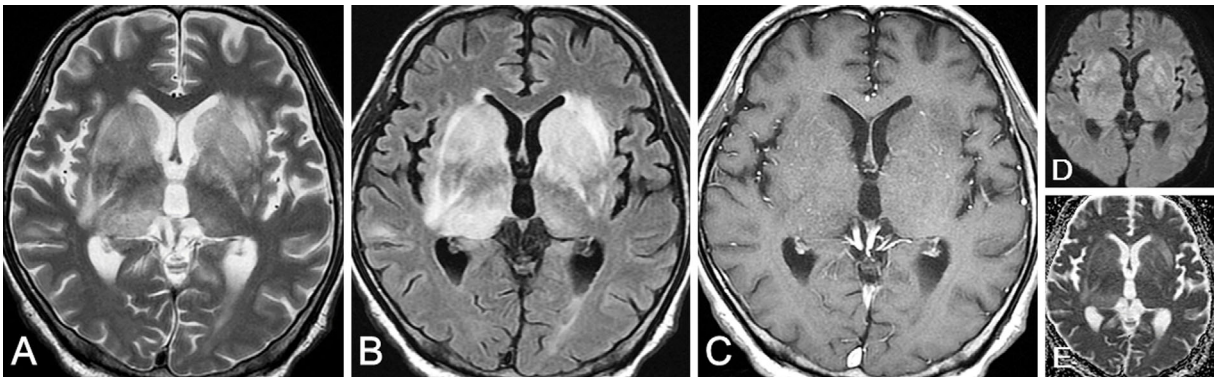
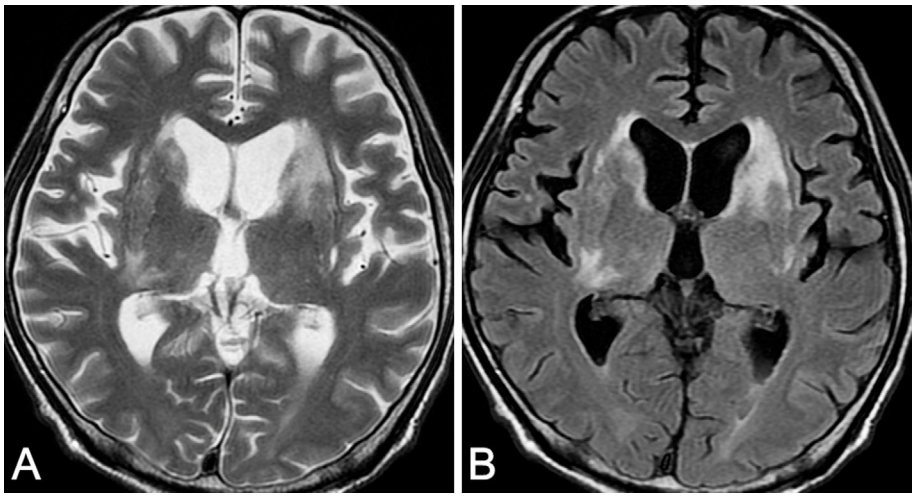


Picture 1.



Picture 2.

A 53-year-old man with a 1-month history of arthralgia suffered acute conscious disturbance. He exhibited lethargy, bradykinesia, and rigidity in the four extremities on admission. Based on the presence of lymphocytopenia, hypocomplementemia, and antinuclear and anti-Sm antibodies positivity, he was diagnosed with neuropsychiatric systemic lupus erythematosus (SLE) (1). Fundoscopy revealed cotton-like white spots and retinal hemorrhage, which were consis-

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tent with the diagnosis of SLE. T2-weighted magnetic resonance imaging (MRI) of the brain demonstrated bilateral symmetric hyperintensity (Picture 1A). Fluid-attenuated inversion recovery (FLAIR) MRI of the brain (Picture 1B) revealed hyperintensity of the basal ganglia and thalami without postcontrast enhancement (Picture 1C) or restricted diffusion (Picture 1D, E). This characteristic imaging pattern suggested antibody-mediated autoimmune striatal encephalitis, including neuropsychiatric SLE and anti-N-methyl-D-aspartate receptor striatal encephalitis, as well as viral encephalitis [especially flaviviruses (e.g., Japanese, West Nile, etc.)] as a differential diagnosis (2). Treatment with high-dose pulsed intravenous methylprednisolone and intravenous cyclophosphamide resulted in the reduction of the high-intensity areas on T2-weighted MRI (Picture 2A) and FLAIR MRI (Picture 2B).

The authors state that they have no Conflict of Interest (COI).

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References

1. Petri M, Orbai AM, Alarcón GS, et al. Derivation and validation of the Systemic Lupus International Collaborating Clinics classification criteria for systemic lupus erythematosus. Arthritis Rheum **64**: 2677-2686, 2012.

2. Kelley BP, Corrigan JJ, Patel SC, Griffith BD. Neuropsychiatric lupus with antibody-mediated striatal encephalitis. AJNR Am J Neuroradiol **39**: 2263-2269, 2018.