소아재활

게시일시 및 장소 : 10 월 19 일(토) 08:30-12:30 Room G(3F)

질의응답 일시 및 장소 : 10 월 19 일(토) 11:00-11:30 Room G(3F)

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A Case of Acute Necrotizing Encephalitis associated with Influenza B Virus Infection

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Acute necrotizing encephalitis (ANE) is a clinico-radiologic disease characterized by multifocal, symmetric lesions in bilateral thalami, brain stem, periventricular white matter, basal ganglia and cerebellum. During the clinical course, lesions progress from edema to petechial hemorrhage and necrosis. It is considered to be a parainfectious disease that is triggered mainly by viral infections, especially influenza A. Since ANE was first proposed as a distinct disease in 1995, less than 30 cases have been reported in Korea. Furthermore, none of these cases were caused by influenza B virus infection. We report the case of a 11-year-old Korean patient with influenza B-associated ANE. A 11-year-old boy presented to a emergency department with a 1-day history of cough, rhinorrhea, fever (up to 39.1℃) and confused mentality. He was diagnosed with influenza B infection by rapid antigen test and real-time polymerase chain reaction analysis. Initial brain magnetic resonance imaging (MRI) showed increased T2 signal intensity in left superior parietal lobe, bilateral thalami, pons, and periventricular white matter, with swelling of bilateral thalamus. Cerebrospinal fluid (CSF) analysis revealed WBC count of 7 cells/mm3, elevated protein level of 83.4 mg/dL, glucose level of 86.5 mg/dL and no organisms on CSF culture. The initial laboratory findings showed mild elevation of an aspartate aminotransferase level of 159 U/L and an alanine aminotransferase level of 84 U/L without elevated serum ammonia level. In the intensive care unit, he treated with intravenous immunoglobulin and steroid in addition to antiviral therapies. Therapeutic hypothermia was done for 3 days. Two weeks later, follow-up brain MRI revealed decreased extent of the lesions and resolution of edema. Susceptibility weighted image showed stippled low signal intensities which suggest petechial hemorrhage. After 3 months, he was able to follow 2-step commands, control his head, and sit with minimal assistance. However, gait and language disabilities were remained. ANE is a devastating disease and has been rarely reported in Korea. This is the first case report of ANE caused by influenza B virus infection in Korea.