CLINICAL PRACTICE

*Clinical Practice: Clinical Images***Confusion Secondary to Herpes Simplex Infection**

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Figure 1. MRI (T2-weighted image) demonstrating involvement of the medial temporal lobes, bilateral orbito-frontal lobes, cingulate gyrus, and insular cortex, as well as gyral edema.

A 57-year-old woman presented with a rapid onset of headache, vomiting, and confusion. She had a temperature of 103° Fahrenheit and was delirious. Brain magnetic resonance imaging (MRI) showed high signal intensity in the right temporal, bilateral orbito-frontal lobes,

Figure 2. MRI (T2-weighted image) demonstrating involvement of the medial temporal lobes, bilateral orbito-frontal lobes, cingulate gyrus, and insular cortex, as well as gyral edema.

and left temporal pole on T2-weighted imaging (Figs. 1 and 2). Cerebral spinal fluid (CSF) demonstrated lymphocytic pleocytosis with a red blood cell count of 45 cells/mm³. Intravenous acyclovir was started, and CSF polymerase chain reaction (PCR) subsequently returned positive for herpes simplex virus (HSV).

Brain MRI is the diagnostic test of choice in herpes simplex encephalitis (HSE) especially in the early course of the disease, with a sensitivity of >90 %, ^{1–3} compared to a sensitivity of 50 % with computed tomography.⁴ HSV PCR of the CSF is often negative in the initial 72 hours of illness.⁵ Characteristic MRI findings involve the medial temporal lobes, cingulate gyrus, and insular cortex, with gyral edema.⁶ The International Herpes Management Forum recommends that all patients with HSE receive intravenous acyclovir 10 mg/kg every 8 hours for 14–21 days. Due to the high morbidity and mortality of untreated HSE, acyclovir should not be withheld if diagnostic test results are delayed.^{7,8}

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