

[PICTURES IN CLINICAL MEDICINE]

Clinically Mild Encephalitis/Encephalopathy with a Reversible Splenial Lesion due to *Legionella* pneumonia

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Picture 1.



The patient was a 43-year-old man with no significant medical history who was transferred to our emergency department due to fever and dysarthria. On examination, he appeared ill and febrile, with a body temperature of 39.8°C. His respiratory rate was 20 breaths/min, with a percutaneous arterial oxygen saturation of 90% on room air. Coarse crackles were heard in the lower right lung field and dysarthria was observed; there were no other remarkable neurological findings. Laboratory tests revealed hyponatremia and elevated levels of inflammatory markers, creatinine, and liver enzymes. A chest radiograph showed consolidation of the lower right lung field. Diffusion-weighted magnetic resonance imaging (MRI) on the first day of hospitalization showed an area of high intensity in the splenium of the corpus callosum (Picture 1). A Legionella urinary antigen test was positive. We diagnosed the patient with clinically mild encephalitis/encephalopathy with a reversible splenial lesion (MERS) due to Legionella pneumonia; this was character-

ized by transient symptoms and MRI findings of a reversible lesion in the splenium of the corpus callosum (1).

Treatment with intravenous levofloxacin, immunoglobulin, and methylprednisolone was initiated and the patient's symptoms and imaging findings improved on the 13th day of hospitalization (Picture 2).

Patients with *Legionella* pneumonia can show reversible neurological and imaging findings. MERS can also be caused by other infections (2), hypoglycemia, and antiepileptic drugs.

The author states that he has no Conflict of Interest (COI).

References

1. Tada H, Takanashi J, Barkovich AJ, et al. Clinically mild encephalitis/encephalopathy with a reversible splenial lesion. Neurology

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2. Takatsu H, Ishimaru N, Ito M, et al. Mild encephalitis/encephalopathy with a reversible splenial lesion in an adult patient with influenza. Intern Med **15**: 3093-3095, 2017.

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