Lyme disease (LD), a condition originally identified in Lyme/Old Lyme, Connecticut, has various clinical manifestations and severity. Therefore, early diagnosis and treatment can be challenging even though it is the most common arthropod-borne infection. Here we present a case of Lyme borreliosis reinfection with atypical presentation.

Reported Cases of Lyme Disease — United States, 2018

A 43-year-old man from Connecticut with a past medical history of hypertension, obstructive sleep apnea, presented with altered mental status and garbled speech.

Initially, he started to have a fever at 38°C with generalized weakness and diaphoretic. The following day, the patient was found out to be very confused and acted oddly. He stared into blank spaces and spoke gibberish.

He remained hemodynamically stable. Lab work was unremarkable. Chest X-ray and computed tomography scan of the head were normal. CSF analysis showed leukocyte 100, glucose 77, and protein 71. CSF PCR of enterovirus, HSV 1 and 2 were negative. HIV and syphilis were also negative. Further brain MRI did not find evidence of meningitis or encephalitis. The patient was empirically treated with acyclovir.

On further questioning, we learned that the patient had two episodes of LD infections after a witness tick bite with a classical bull eye sign. He completed the last treatment about five years ago. The CSF antibody index was positive. Serum Borrelia burgdorferi C6 Peptide Antibody assay was also positive. LD testing of Western Blot revealed IgG 10/11, IgM 2/3 positive, which was different from the previous result. This confirmed the diagnosis of aseptic meningitis secondary to LD reinfection.

The patient underwent doxycycline treatment for six weeks and his mental status gradually improved.