

CASE 2003-6

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Clinical History: A 73 year old man presented to his physician with a four day history of fever, body aches, and malaise. His past medical history was remarkable only for babesiosis and Lyme disease. He spent much time outdoors. On exam he had a low grade fever. He had no neck stiffness, rash, cough, or gastrointestinal symptoms. He was sent home. Over the next two days his condition worsened, and he was admitted to the hospital. Examination showed slow mentation, dysarthria, and profound weakness in all extremities, lower worse than upper. He required a cane to walk. Reflexes were normal, and he was afebrile. A CBC showed lymphopenia. He was admitted and died 36 hours later.

Autopsy Findings: The general autopsy was significant only for bronchopneumonia, and a postmortem blood culture grew *Klebsiella pneumoniae*.

Neuropathology: The brain and spinal cord were grossly unremarkable. Microscopic sections demonstrated severe meningomyeloencephalitis consistent with viral encephalitis. There were widespread microglial infiltrates in the brain and spinal cord and scant mononuclear inflammation in the subarachnoid and perivascular spaces. The microglial infiltrate was most intense in the ventral horns of the spinal cord at all 12 levels sampled. In some areas the infiltrate was confluent and associated with lower motor neuron loss. A small amount of microglial infiltrate was present in the dorsal horns and spinal white matter. A single inflammatory focus was present in one cauda equina nerve root and in the trochlear nerve. The microglial inflammation was present in decreasing intensity in the medulla (gray matter more than white matter), cerebellum (especially the dentate nucleus, Purkinje cell layer and the molecular layer), thalamus (not in the internal capsule), the hippocampus (gray and white matter) and the cerebrum (gray and white matter).

Material Submitted: An H&E stained section of spinal cord is submitted.

Points for Discussion:

1. Diagnosis.
2. Etiology.