42nd ANNUAL DIAGNOSTIC SLIDE SESSION 2001

CASE 2001-09

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Clinical History: A 34-year-old male was admitted in a confused and agitated state. At 11 AM on the day of admission he was noted to be "staggering around the house" and later in the afternoon developed right-sided weakness and inability to speak. On admission, he was unintelligible, thrashing about with his left side and unable to move his right arm or leg. A right-sided facial droop was noted. A CT of the head showed no acute hemorrhage. Urine toxicology screen was negative. Therapeutic and diagnostic efforts were directed at possible infectious etiologies. CSF and blood cultures were negative.

On the morning after admission, he became unresponsive to pain, with decerebrate posturing and unresponsive pupils. MRI showed diffuse edema and possible recent infarcts. Shortly thereafter, brain death was confirmed and life support was discontinued, 36 hours after admission.

Past medical history is significant for an Emergency Department visit for fever and headache with myalgias, one month prior to the current admission, with a normal neurological examination; headaches had gradually worsened since that time, according to his girlfriend. Night sweats and chills were present, as well.

Autopsy Findings: A complete autopsy was performed. Systemic passive vascular congestion was identified, presumably a terminal event. No significant systemic gross or histopathologic findings were noted. After formalin fixation, the brain showed flattened gyri and herniation; coronal sections showed multiple areas of softening and dusky discoloration, particularly at the depths of the cortical gyri. Brain tissue submitted for bacterial, mycobacterial and fungus cultures showed no growth.

Material Submitted: H&E section of cerebral cortex, hippocampus, or pons

Points for Discussion:

1. Diagnosis
2. Distribution of Lesions
3. Pathogenesis