CASE 1997-6

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Clinical History:

A cachectic 33-year old male with AIDS (CD4+ T cells =2) presented because of sudden onset, transient right-sided hemiparesis and left temporal headache. His temperature was 100 °F, mental status was normal, and a neurologic examination was non-focal. The cerebrospinal fluid showed a protein of 100 mg/100 ml (nl 15-45), glucose of 43 mg/100ml (nl 45-80), and no cells; a negative India ink preparation; and negative AFB, fungal, and bacterial cultures. Magnetic resonance imaging (with and without contrast) showed many well-circumscribed 0.5-1.0 cm, peripherally and diffusely enhancing lesions of the cerebral cortex, deep nuclei, cerebellum and brainstem without significant edema or mass effect. The patient was treated empirically for toxoplasmosis, but therapy was discontinued because of intolerance.

He was readmitted two weeks later after new-onset complex tonic-clonic seizures. Neurologic revealed a sluggish left ocular light reaction and a left eyelid lag. The white blood cell count was 900/mm³ with 74% neutrophils, 8% monocytes, and 2% lymphocytes; hematocrit was 24%; and platelets were 4200/mm³ Other blood studies revealed normal electrolytes and liver

function tests and negative RPR, ANA, cryptococcal antigen, AFB, bacterial, and fungal cultures. Computed tomography scans with contrast performed at the beginning of June were essentially unchanged from the may MRI studies, except for occasional punctate foci of calcification suggestive of neurocysticercosis. Serum toxoplasma and cysticercosis titers were 1:16 and <1:10, respectively. Seizures were controlled with phenytoin. The patient was discharged in stable condition and died at home about 4 weeks later, 2 months after his initial hospital presentation.

Necropsy was restricted to examination of the brain.

Material submitted: H&E-stained and unstained sections of the cortex and subcortical white matter.

Points for discussion:

- 1. Diagnosis
- 2. Pathogenesis