55th ANNUAL DIAGNOSTIC SLIDE SESSION 2014.

CASE 2014 [6]

Submitted by:
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Clinical History:

A 49-year-old right-handed woman originally from South America was admitted with a 3-week history of progressive altered mental status, headache, and right-sided weakness. On the day of symptom onset, she presented to an outside hospital and MRI of the brain revealed two ring-enhancing lesions associated with edema. She was also diagnosed with AIDS (CD4 count of 38 cells/μL and an HIV viral load of 375,000 copies/mL). The patient underwent an MRI-guided biopsy of the left parietal lesion at the outside hospital. The patient was hospitalized for two additional weeks and eventually was discharged on sulfadiazine and pyrimethamine based on the biopsy diagnosis.

On admission to the hospital, she was afebrile and physical examination was notable for altered mental status and weakness of the right upper and lower extremities (Medical Research Council (MRC) grade of 3/5). There was no sensory deficit. MRI of the brain showed worsening ring-enhancing lesions within the right superior frontal gyrus (1.4 x 1.2 cm) and left parietal lobe (2.4 x 2.2 cm), moderate vasogenic edema and regional mass effect, and adjacent leptomeningeal enhancement. She was started on oral sulfadiazine, pyremethamine, and glucocorticosteroids. On hospital day 5, the patient had worsening mental status and a CT of the head showed enlargement of the right frontal lesion with increased edema.

The brain biopsy slides were obtained from the outside hospital.

The patient was treated with the appropriate therapy and HAART and she survived but remains severely impaired.

Material submitted:

1. Virtual H&E stained glass slide from a biopsy of left parietal mass.
2. Coronal MRI of the brain.

Points for discussion:

1. What are the important epidemiologic factors underlying this disease and how are these relevant to the practice of neuropathology in the United States?
2. What are the neurologic sequelae that may arise from this disease?