Case 3

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Reference No.:

Clinical Abstract:

The patient was a 29-year-old homosexual male who presented 12 months antemortem with fever and thrombocytopenia. Stool cultures were positive for Entameba histolytica and a bone marrow biopsy was consistent with idiopathic thrombocytopenic purpura. He subsequently developed Pneumocystis carinii pneumonia, left forearm Herpes zoster, and bilateral CMV retinitis. Six months antemortem he again developed herpetic dermatitis of the right forearm and hand and left posterior thorax. At this time the patient displayed poorly described intermittent episodes of expressive aphasia.

Four months antemortem the patient was admitted for evaluation of confusion. Neurologic examination revealed disorientation, dysarthria, a nominal aphasia, dyscalculia, decreased short term memory and an inability to follow simple commands. Cranial nerve examination revealed a fixed 6 mm right pupil and a 4 mm reactive left pupil. There was a right pronator drift, symmetric reflexes and bilateral plantar flexor responses. CTT head scan with and without contrast was normal. Cerebrospinal fluid examination showed a protein of 90 mg.%, normal glucose, no cells and a negative culture.

Three weeks antemortem the patient was admitted for evaluation of fever and progressive deterioration of his mental status. Neurologic evaluation revealed an awake male, eyes open, without speech production but with rare following of one-step verbal commands. Cranial nerve examination was remarkable for bilateral blindness and bilateral primary position downbeat and rotatory nystagmus. Sensorimotor examination revealed diffuse spasticity, bilateral frontal release signs and plantar extensor responses. CTT head scan with and without contrast was normal and cerebrospinal fluid evaluation was remarkable for a protein of 131 mg.%. The patient developed bilateral pneumonia and died of respiratory failure.

Autopsy findings included Pneumocystis carinii pneumonia and aspiration bronchopneumonia and multiple granulomata containing acid-fast bacilli in lymph nodes, spleen and liver. The brain weighed 1350 g. On coronal section, soft, granular, yellow-gray lesions that usually were well demarcated were present throughout the white matter of the brain and brainstem. These lesions ranged in size from 0.5 cm. to 2.5 cm. in diameter. The optic tracts were atrophic. The ventricles were mildly dilated. Sections of cerebellum and spinal cord were grossly unremarkable.

Material submitted: One 2 X 2 Kodachrome of anterior frontal lobes
One H & E slide from right parietal lobe

Points for discussion: 1. Diagnosis
2. Pathogenesis