

45<sup>TH</sup> ANNUAL DIAGNOSTIC SLIDE SESSION 2004  
CASE 2004-11

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**Clinical History:** A 41-year old woman, with a two and a half year history of complex neurologic symptoms, was first evaluated at our institution. She initially presented with a twelve-month history of transient left sided paresthesias and a five-month history of visual abnormalities. Her past medical and family histories were noncontributory. Magnetic resonance imaging (MRI) of the brain revealed multiple areas of decreased T2 signal involving the frontal lobes bilaterally and the left parietal cortex. Minimal enhancement after administration of gadolinium was observed in some of these lesions. A subacute infarct involving the deep right parieto-occipital lobes consistent with a right posterior cerebral artery (PCA) distribution was also identified on T2 and diffusion weighted images. A transesophageal echocardiogram was also performed to exclude the possibility of a cardiac source of embolism, and was unremarkable. In the suspicion of CNS vasculitis, a right temporal lobe biopsy was obtained which, however, showed only mild nonspecific gliosis.

Two days prior to the current admission she developed progressive left hemiparesis and headaches. Neurologic exam revealed a left upper quadrant visual defect. Extraocular muscle movement was normal. She was oriented to person, place, and time. Increased muscle tone with associated weakness was noted on the left extremities. A left Babinski sign was elicited. Coordination was unaffected. Routine laboratory tests on admission were normal except for borderline microcytic anemia, increased erythrocyte sedimentation rate at 47 mm, and mild elevation of serum calcium and alkaline phosphatase. Computed tomography of the head without contrast showed recent intraparenchymal hemorrhage in the right frontal lobe, with surrounding edema and mass effect on the right frontal ventricular horn, as well as a remote infarct in the right PCA territory. A rim of enhancement on the right frontal lesion was demonstrated by MRI as well as a separate focus of hemosiderin in the right parietal lobe. A cerebral angiogram highlighted a 3-mm left internal carotid aneurysm with a wide neck just proximal to the origin of the ophthalmic artery, and mild luminal irregularity with focal dilatation of distal branches of the left middle cerebral artery.

After admission her left hemiparesis worsened and she was taken to the operating room. A right frontal craniotomy was performed with evacuation of right frontal and parietal hematomas.

**Material submitted:** Representative H&E section of resected intracerebral clot.

Points for discussion:

1. Diagnosis
2. Pathogenesis