Canadian Association of Neuropathologists
L’Association Canadienne des Neuropathologistes

CASE No 13

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This previously healthy 33 year old man presented following sudden onset of severe headache, accompanied by nausea and photophobia, but not by impairment of consciousness. CT and MR imaging showed an extra-axial, dural-based mass (4.1 x 3.5 x 3.8cm) in the left anterior frontal region. There was an adjacent fronto-parietal acute subdural hematoma up to 0.2cm in thickness. The mass showed heterogeneous signal on T1 and T2 weighted sequences, compatible with hemorrhage, and heterogeneous enhancement post-gadolinium. Angiography demonstrated a highly vascular lesion. Neuroimaging was otherwise unremarkable. There was no family history of neurological disease. The patient responded well to conservative management with analgesia, mannitol and dexamethasone. He was evaluated for embolization of the mass prior to operative management, but it was concluded that it was not embolizable.

The patient initially wished to have the mass biopsied only, but 6 months following his initial presentation he consented to undergo a second craniotomy for complete excision of the lesion. Intraoperatively the mass was found to be friable and highly vascular. The neurosurgeon documented a relatively well-defined plane between the mass and the brain. The patient made an uneventful postoperative recovery.

Material submitted: HPS stained section of the excised frontal mass

Questions: Diagnosis?
Pathogenetic relationship between the two components?