Canadian Association of Neuropathologists
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CASE No 13

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A 38 year-old female presented with a 1-week history of a throbbing intermittent occipital headache that was worse when bending over. She complained of intermittent right leg>arm clumsiness, and that for the last week, at times, she felt like she was 'missing a step'. On the day of admission the headache was more severe, her right temporal visual field was blurry, and her right leg was weak. She also described some unsteadiness.

Past medical history was relatively unremarkable. She had a 'hypersensitivity' to Demerol. There were two miscarriages in the past. She was not a smoker, and only occasionally consumed alcohol. Family history was remarkable for an uncle (from NFLD.) who died from glioblastoma multiforme.

On examination, the patient was alert and oriented. The left optic disc was difficult to visualize. ER note suggested right facial droop. Tone was elevated and power was abnormal in the right leg (hip/knee flexors rated at 4+/5, with knee extensors and plantar/dorsiflexors 3/5). Subtle right pronator drift was described. Cerebellar and coordination testing revealed slowness of the right leg with rapid alternating movements, and abnormalities with heel-shin testing.

MRI revealed a 6.0 x 5.2 x 3.9 cm cystic lesion in the left frontal lobe lying close to the lateral ventricle. There was a heterogeneously enhancing mural nodule in the inferior aspect of the cyst, and a thin smooth rim of enhancement demarcated the entire lesion. Portions of the nodule were calcified and hemorrhagic; the nodule measured 3.6 x 1.9 cm. There was minimal mass effect, and a small amount of edema was noted at the postero-superior tumor aspect. There was no hydrocephalus and basal cisterns were patent. A small blood-fluid level was noted; imaging characteristics of the fluid were similar to CSF (although slightly more hyperintense on T1 and FLAIR sequences). The inferior aspect of the lesion contained some enlarged tubular structures (possibly blood vessels) and a diagnosis of hemangioblastoma was entertained.

A left craniotomy and lesional resection was completed soon after presentation. Hemorrhage was noted in the medio-inferior aspect of the cystic lesion. The abnormality extended down to and just into the left lateral ventricle. A surgical plane was easily obtained.

Materials submitted: One H&E stained section of the lesion.

Question: Differential diagnosis?