CASE No 1

D.G. Munoz¹, L. Noel De Tilly² and R. Perrin³

¹Department of Laboratory Medicine and Pathobiology, ²Department of Radiology, ³Department of Surgery, St. Michael’s Hospital and Li Ka Shing Knowledge Institute, University of Toronto, Ontario, Canada

A previously well 54 year old woman presented with a two-month history of mild headache, dizziness, and left hand clumsiness. Neurological examination was normal.

A CT scan revealed a 3.4 x 2.8 cm isodense mass in the deep white matter of the right frontal lobe, and just superior to it, a second 2 cm mass adjacent to a 9 mm rounded dense calcification. MRI showed an oblong, multilobulated mixed signal mass, 4.1 cm in diameter, occupying the superficial and deep aspect of the right parietal lobe. This lesion was of mixed signal on the T1 and T2-weighted weighted images and contained several discrete cysts. Several foci of hyposignal were identified on the gradient-echo sequence related either to small calcifications or hemorrhagic foci. Following gadolinium administration, there was intense heterogeneous enhancement. The lesion was associated with a large amount of edema occupying the right frontal, temporal, and parietal lobes, extending into the corpus callosum. There was mass-effect with compression of the right lateral ventricle, partial obliteration of the right hemispheric sulci, and distortion of the basal cisterns by herniation of the right temporal lobe.

At surgery, the mass was described as having a “fairly well-defined capsule”. Some of the mass, specifically superficially, was hard and partially appeared to be calcific. The deeper aspect of the tumour was very friable and more vascular. The mass was resected.

Material submitted: One representative HPS slide

Question: Diagnosis?