Canadian Association of Neuropathologists
L'Association Canadienne des Neuropathologistes

CASE No 11

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This 58 year old man presented in with a first seizure that began with movement of the right hand followed by jerking movements in all four limbs. He had suffered from writer's cramp for 30 years, and was on treatment for hypertension, gout and gastroesophageal reflux. Physical examination was unremarkable. CT showed a non-enhancing hypodense lesion involving the white matter of the left frontal and temporal lobes. On MRI the lesion appeared to spare the overlying cortex, was hypointense on T1, hyperintense on T2 FLAIR and did not enhance with gadolinium, however mild leptomeningeal enhancement was noted. He was scheduled for surgical biopsy the next month, but the lesions had almost disappeared on repeat imaging, so surgery was cancelled. He was discharged on carbamazepine but presented with a second seizure 2 months later and was readmitted. Physical examination was again unremarkable. Imaging showed a return of his imaging changes in the left hemisphere. MR Spectroscopy reported changes more suggestive of an inflammatory process than a neoplasm. The patient was biopsied shortly thereafter, 3 months after initial presentation. Cortex and white matter from the left middle frontal gyrus, consisting of multiple fragments up 1.3cm in greatest dimension were submitted for pathological examination.

Material submitted: Hematoxylin and eosin stained sections of the left frontal biopsy

Question: Diagnosis?