Canadian Association of Neuropathologists
L'Association Canadienne des Neuropathologistes

CASE No. 11

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A 74 year old man presented with gait unsteadiness and falls and on exam he had wide-based gait and left arm dysmetria. Two months previously he had visited his neurologist for headaches from cervical spondylosis and his neurological exam was normal. Past medical history included cutaneous sarcoidosis controlled with prednisone and methotrexate, psoriasis treated with hydroxychloroquine, lymphopenia, squamous cell carcinoma of the lung 6 years previously, and smoking.

Initial MRI of the brain revealed an old lacunar infarct of the right caudate. Routine bloodwork showed lymphopenia and CSF was eucellular with normal protein and glucose. There was no recurrent lung cancer on chest CT scan. Paraneoplastic antibodies including anti-Hu, anti-Yo, anti-Ri, anti-NMDA, anti-AMPA, and anti-VGKC were negative. Molecular studies for autosomal dominant spinocerebellar ataxias (SCA1, 2, 3, 6, 7, 8, and 17) and fragile X ataxia syndrome were normal.

The patient's cerebellar symptoms worsened over the next five months and he became wheelchair bound. Subsequent MRIs showed progressive signal change without contrast enhancement or restricted diffusion within the left middle cerebellar peduncle, with low grade glioma being the favoured radiologic diagnosis. CSF sent for JC virus PCR was negative. The patient developed left sixth cranial nerve palsy, became bedbound, and died six months after his neurological symptoms began.

Materials Submitted: one H&E/LFB stained slide of cerebellum
Question: Name 2 diagnoses