

**Canadian Association of Neuropathologists**  
**L'Association Canadienne des Neuropathologistes**

**CASE No 5**

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This 83 year old right-handed Italian man was assessed initially in January 2003 for severe leg weakness and balance difficulties. MRI of the thoracic spine revealed transverse myelitis extending from T5 to T12. He was treated with steroids and recovered from this event within a few weeks.

He was well for one year when he was again admitted for tingling in his feet, rapidly ascending towards hip level, and within a few days accompanied by bilateral leg weakness. On neurological examination, he had non-sustained asymmetric clonus in the lower extremities, bilateral lower extremity weakness, abnormal deep tendon reflexes and sensory level at T6. Multiple tests for autoimmune diseases, Lyme disease and paraneoplastic screen including anti-YO, anti-HU and anti-RI were all negative. CSF showed elevated IgG (0.12 g/L), positive oligoclonal band and abnormal IgG/albumin CSF index elevated to 16 (normal 11). MRI revealed numerous small foci of high FLAIR and T2 signal abnormality from T10 to T12 of spinal cord as well as in the pons, cerebral white matter, thalami, external capsules and the right caudate head. Following treatment with steroids, he had once more near complete recovery. During the next two years he had several hospital admissions for recurrent episodes of ataxia, facial weakness, hemiparesis and/or bladder dysfunction, each time improving after corticosteroids. MRIs performed at each admission revealed "innumerable" foci of T2 hyperintensities in the cerebral white matter. In the terminal stage, he developed quadriplegia and died approximately four years from the onset of disease.

Material Submitted: LFB/PAS section of corpus callosum with cingulate gyri

Question:                    Diagnosis?