

CASE 2000-9

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Clinical History: The patient was a 65-year-old man who complained of gait difficulty. He first noted problems some ten years ago, following coronary bypass surgery, when he began to fall while running. He reported that he needed to hold onto railings while walking up and down stairs. As this progressed, he stated that when he officiated at funerals and had to walk behind a casket while reading from a book, he had to hold onto the casket itself, to prevent himself from falling. His general physical examination was normal, with blood pressure 90/60 mm Hg. Neurological examination revealed a "weaving" gait, with difficulty with tandem walking. He was unable to hop on both feet, and he had some heel-to-shin ataxia in the left leg only, with no finger-to-nose dysmetria. Ankle reflexes were absent, with preservation of other reflexes and no long tract signs. Muscle strength was normal. He had diminished vibration sensation in the upper and lower extremities, much worse in the legs, with normal position, touch, pin and temperature sensation. Mentation was normal, as were the cranial nerves, except for slightly decreased hearing on the right.

A serum ELISA for Lyme disease was positive, as was ELISA in the CSF, but serum Western blot was negative. The serum was negative for Hu and anti-MAG antibodies. CSF protein was 37, glucose 64, with no cells, and no oligoclonal bands. MRI scans disclosed multiple white matter hyperintensities, in the cerebral hemispheres only. EMG and nerve conduction showed slowed conduction velocities, with results suggesting axonal and demyelinating polyneuropathy.

Material Submitted: One 1 μ section, stained with toluidine blue, from a sural nerve biopsy.

Points for Discussion:

1. Diagnosis
2. Pathogenesis
3. Prognosis