

56th ANNUAL DIAGNOSTIC SLIDE SESSION 2015.

CASE 2015-7

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Clinical History: The patient is a 55 year old man who presented with a three month history of progressive gait unsteadiness with numbness and tingling of his feet and fingertips as well as right foot weakness. His medical history was significant for an unintentional 25-pound weight loss over the past year, hypertension, 80 pack-year smoking history, and a small bowel resection for perforation 12 years prior.

Neurologic examination showed a severely ataxic gait, positive Romberg sign, loss of vibration and proprioception in his feet, and decreased pinprick sensation in his feet without a sensory level. His hip and knee flexion strength was mildly decreased bilaterally. His reflexes were brisk in the upper extremities and absent in the lower extremities.

Laboratory studies were significant for a microcytic anemia with a hemoglobin of 9.3 g/dL and MCV of 72.9 fL. Tissue transglutaminase antibodies were positive and endoscopic biopsy confirmed a diagnosis of celiac disease. Additional laboratory studies including vitamin B12, thiamin, and vitamin E levels, serum protein electrophoresis, fasting glucose and hemoglobin A1C, liver function tests, electrolytes, TSH, ANA, paraneoplastic antibody panel, PSA, PET-CT, as well as serology for Anaplasma, Erlichia, Babesiosis, and Lyme disease were all unrevealing. CSF examination was normal.

Head CT and MRI were unremarkable. Spine MRI showed a very subtle T2 signal hyperintensity within the dorsal columns (white arrow) but no other abnormalities. Additional laboratory studies were performed which led to a diagnosis for his neurologic symptoms. Five months later, he collapsed suddenly and died.

Autopsy findings: Autopsy disclosed a ruptured basilar tip aneurysm with severe subarachnoid hemorrhage.

Material submitted: H&E slide of the spinal cord. MRI image.

Points for discussion:

1. Etiology and Pathogenesis
2. Neuropathologic findings and differential diagnosis