49th ANNUAL DIAGNOSTIC SLIDE SESSION 2008

CASE 2008-4

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(Case 04A-65)

Clinical History: 73-year-old male admitted in 6/2004 with a 19-year history of progressive myelopathy that began with increased urinary frequency (1985), constipation (1988), erectile dysfunction. Motor symptoms began with left foot limp, fatigue and aching in his legs (1989).

1991: CSF: 3 WBC, 9 RBC, Pro 41, Glc 54, elevated IgG index (1.23) with oligoclonal bands. CSF cytology and VDRL negative; B12 levels normal.

1993: MRI of brain and spinal cord: T2 prolongation of subcortical white matter and C5-6 disc protrusion causing flattening of anterior portion of the cervical cord.

1996: Needed a cane and walker; was self-catheterizing for a spastic bladder. Exam: moderate spastic paraparesis with normal tone and strength of upper extremities. Questionable sensory level to pinprick and cold at T2-3 level but essentially neurologically unremarkable above that level.

1998: Wheelchair-bound. Leg cramps and spasms and intermittent bowel incontinence persisted. Exam: 3/5 weakness of R and L ileopsoas, trace weakness of L quad, 3/3 weakness of hamstrings and adductors, trace weakness in hip adduction and R- greater than L-side hyperreflexia.

8/2003: C6 incomplete quadriplegia (plegic LEs, 4/5 strength UEs), neurogenic bladder and bowel.

PMH: Hepatitis, possibly alcohol-related; no smoking since 1970s; no drugs. Developed non-insulin dependent DM, hypertension, anemia of chronic disease, decubiti. Surgeries included urologic procedures, C5-C6 fusion/laminectomy for cervical stenosis (no benefit), L carotid endarterectomy.

Course: On admission, he was bed-bound with chronic indwelling catheter. He developed renal failure, tachycardia and died 6/23/04.

General Autopsy: Decubitus abscess, pneumonia, emphysema, dislocated L hip, atherosclerotic /hypertensive vasculopathy, nephrosclerosis, splenomegaly (400g), atrophy of skeletal muscle.

Neuropathology: The fixed brain weighed 1300 g. Coronal sections of cerebral hemispheres: marked dilatation of anterior horns, slight dilatation of the rest of the ventricular system. Heads of caudate nuclei had flattened contours; no other gross abnormalities of hemispheres, brain stem or cerebellum were noted. Spinal cord dura was normal; leptomeninges were slightly thickened. The cord was very atrophic; cervical and lumbosacral enlargements were less pronounced than normal; cauda equina nerve roots were thin. Transverse sections showed a narrow cord with gray discoloration of lateral columns especially at the thoracic levels.

Material Submitted: 1 H and E stained and 1 unstained slide of different spinal cord levels

Points for Discussion: Diagnosis, Pathogenesis