Clinical Abstract: A 57 year old black male was admitted with a short history of bilateral leg numbness and weakness, inability to urinate, headache, chills and abdominal pain. He had a temperature of 101.2, pulse of 120 and respiratory rate of 22. The patient was oriented and cranial nerves were intact. He had a flaccid paraparesis with lower extremity areflexia; Babinski signs, bladder distension, and no sensation below the third lumbar dermatome. Emergency myelogram demonstrated viscous turbid cerebrospinal fluid (CSF), with a total protein of 715 mg/dl, glucose of 320 mg/dl (concurrent serum glucose level 133 mg/dl) and 7900 white blood cells (98% polymorphonuclear cells). Myelogram demonstrated poor filling of the left high cervical region; however, there was no evidence of blockage of flow or cord compression.

Over the next day the patient sequentially developed complete paraplegia and a C3 sensory level. He became dysarthric, lost sensory perception in the third division of the right fifth cranial nerve, lost gag reflex. Cervical and head CT scans on day 2 were normal. He required endotracheal intubation and 12 days after admission the patient became comatose. A vesicular rash on the back and buttocks over multiple dermatomes appeared. He expired 27 days after admission.

Autopsy Findings: Confluent bronchopneumonia with foci of plasmacytic and lymphocytic interstitial infiltrates containing multinucleated cells. Hepatomegaly (2450 gm.) with multiple small foci of necrosis. Hemorrhagic and necrotic adrenal glands. The brain contained several small foci of subarachnoid hemorrhages beneath which were several 2 to 5 mm. hemorrhages. The cervical cord was softened and hemorrhagic in central grey regions superiorly. The entire cord below the 4th cervical level was involved.

Material Submitted: One H&E stained slide from spinal cord.

Point for Discussion: Pathogenesis of the myelopathy.