CASE 2

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A 17 year old, African American female was admitted with a chief complaint of dizziness, weakness and diplopia. Her illness began 2 weeks prior to admission with a "cold," general malaise and anoxia. This was followed in 4 days by heaviness and clumsiness in the left arm and later, by clumsiness in the left foot, incoordination of the right arm and diplopia on looking to the left. She complained of dizziness on standing upright. There was no complaint of headache.

General physical examination on admission was unremarkable. BP 110/70; P 92; R 20; T 99°. Neurological Findings; Normal mental status; diplopia on left lateral gaze with horizontal nystagmus; coarse tremor of tongue; slight dysarthria. Motor strength good with minimal weakness left arm. Reflexes normal except for exaggerated left ankle jerk with unsustained clonus and absent left abdominal. Babinski sign negative, Hoffman sign present bilaterally. Gait unsteady with drift to left. Rapid alternating movements and finger to nose tests poorly performed, especially on left. No sensory abnormalities.

Significant laboratory studies: WBC 5,400 - normal differential. S.T.S. non-reactive. Sickle cell prep. negative. C.S.F. pressure normal; sugar 84; prot. 26; 8 WBC; 95% lymph. Culture negative. The patient's condition remained unchanged until the 6th hospital day when she became lethargic with difficulty in swallowing secretion. X-ray demonstrated bilateral pneumonia. The following day tracheotomy and assisted respiration were required and the patient was placed in a respirator on the 8th day. Cardiac arrest occurred on the 10th day but yield to external massage. During the last two days of her illness persistent tachycardia (130-150/min) developed with a pulse rising to 180/min. The patient expired on the 13th hospital day.

Significant general pathological findings; Acute duodenal ulcer.

<u>Brain:</u> Severe brain swelling with greatest intensity in medulla. Spinal Cord: Single, gray translucent plaques in the lateral columns at C2 and C7. Micro: Perivascular collection of lymphocytes scattered throughout the white matter at all levels of the neuroaxis, with localized demyelination. Similar foci in optic nerve. Patchy demyelination - cauda-equina and peripheral nerves.

Sections; L.F.B. - PAS stain.

Diagnosis; Encephalomyelitis.

Points for discussion: Classification of this case in the category of demyelinating diseases.