

Neurological Case Study

October 14, 2009 Videoconference

History

- 50 yo male diagnosed with HIV in 1991 at Riker's Island in NYC
- Post-release came to us for care in 2003 when hospitalized with *Pneumocystis jiroveci*
 - CD4 15 cells/cmm; Viral load 200,000 c/mL
- Long-standing adherence problems and in/out of care
- Developed pulmonary TB and candidal esophagitis, both successfully treated.
- In 2007 presented with dysarthria and left-sided weakness

CNS Work-up in 2007

- Brain CT and MRI
 - Widespread multifocal disease, with numerous enhancing lesions, both infratentorial and supratentorial, involving brain stem, cerebellum, basal ganglia, and cerebral hemispheres
- Diagnosed empirically with CNS toxoplasmosis
 - *Toxoplasmosis gondii* IgG positive
- Started on sulfadiazine, pyrimethamine, with leucovorin, and HAART
 - Adherence remained a challenge – worked with adherence nurse
 - Complicated by lack of literacy
 - Slow but steady clinical improvement
- Current CD4 164 cells/ and VL 160 c/mL on tenofovir/emtricitabine, ritonavir/darunavir and raltegravir

Pain Syndrome in 2008-2009

- Severe pain in left lower extremity, especially laterally in thigh c/w meralgia paresthetica – always 10/10.
 - Prescribed lidoderm patches, gabapentin, extended release morphine 60 mg t.i.d.
- 4/5 strength in LLE and with left foot dorsiflexion
 - Patellar reflexes 4+/4+ left and 3+/4+ right
 - 2 beats clonus on left; none on right
 - Absent ankle reflexes
 - Toes downgoing

Diagnostics

- Abdominal/pelvic CT scans unrevealing
- Nerve conduction study
 - No lateral femoral cutaneous nerve response bilaterally
 - Common peroneal nerves with normal latency, low amplitude, & slow conduction velocity
 - F waves prolonged bilaterally
 - EMG: Denervation of the anterior tibial muscles bilaterally
 - Conclusion: Diffuse upper & lower extremity polyneuropathy

Questions

- 1) Can a central brain process contribute to peripheral pain?
- 2) Are nerve conduction studies required for a diagnosis of peripheral neuropathy?
- 3) How does one address the patient with leg pains whose nerve conduction study is normal?
- 4) Do opioid narcotics have a role in neuropathic pain?