57th ANNUAL DIAGNOSTIC SLIDE SESSION 2016.

CASE 2016-6

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Clinical History: The patient is a 42-year-old man with a history of HIV infection (CD4 counts in 800-900 range on anti-retroviral therapy), bipolar disorder, and prior episodes of atrial fibrillation, who developed a severe progressive sensorimotor axonal polyneuropathy. The first symptoms (gluteal muscle cramps) appeared after he started a time release form of lithium therapy, but did not improve after discontinuing this medication. Over the next 4-5 months, the patient developed weakness and atrophy of the leg muscles and a loss of sensation with burning in hands and feet. Physical exam was significant for frequent spasms of the masseters, severe atrophy of the leg muscles with rare fasciculations, and strength measurements as follows: deltoids, biceps, triceps, wrist extensors, wrist flexors, and finger extensors all 5/5; finger flexors 4/4; abductor pollicis brevis 4+/4-; abductor digiti minimi 4+/5; first dorsal interosseous 4/5; iliopsoas 5/5; hip abductors 5/5; hip adductors 5/5; quadriceps 5/5; hamstrings 4/4; and very little movement in muscle groups distal to the knees. Pain sensation was impaired in a stocking distribution, ascending halfway up the shin. Vibration was intact. Several EMG/NCS studies demonstrated a sensorimotor polyneuropathy with axonal > demyelinating features. Additional workup was notable for a normal SPEP and free light chain ratio. A sural nerve biopsy was performed.

Material submitted: H&E-stained slides from the nerve biopsy.

Points for discussion:
1. Diagnosis.
2. Differential diagnosis and ancillary testing.