Progressive Multifocal Leukoencephalopathy with Wallerian Degeneration

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A 39-year-old male presented with slurred speech, left hand weakness, gait unsteadiness and headaches over a period of 4 weeks. A brain MRI revealed a right motor strip lesion with Wallerian degeneration along the pyramidal tract plus brain stem and cerebellar FLAIR changes without enhancement (fig. 1). Laboratory findings included a CD4 count of 56, HIV viral load of 2,597 and a positive CSF PCR for JC virus. The patient rapidly decompensated and expired shortly after admission.

Wallerian degeneration results from axonal disintegration following a stereotypical time course and is due to various pathologies including stroke [1, 2] and progressive multifocal leukoencephalopathy.

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Disclosure Statement

None.

References


Fig. 1. FLAIR images demonstrating hyperintensity along the pyramidal tract, brain stem and cerebellum indicating Wallerian degeneration. This signal alteration most ipsilateral likely results from the infectious process.