Teaching NeuroImages: Conus medullaris involvement in cerebrospinal toxoplasmosis

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Figure Conus medullaris toxoplasmosis in advanced HIV

T2-weighted images show 2 round hyperintensities involving the conus medullaris (A) with ring enhancement on contrast T1 images (B).

A 41-year-old woman originally from West Africa presented with a 3-week history of generalized weakness. Clinical examination demonstrated quadriparesis, urinary incontinence, and reduced level of consciousness. The imaging of the neuraxis revealed multiple bilateral cerebral lesions, including basal ganglia and midbrain. Spinal cord imaging showed lesions in the conus medullaris (figure). The HIV test was reactive, with a CD4 count of 10 cells/ μ L (normal range 700–1,200/ μ L). CSF PCR for *Toxoplasma gondii* was positive. CSF cryptococcal antigen, fungal and mycobacterial cultures, Epstein-Barr virus PCR, and *Mycobacterium tuberculosis* PCR were negative.

Conus medullaris involvement is an uncommon manifestation of toxoplasmosis in advanced HIV.^{1,2}

AUTHOR CONTRIBUTIONS

Julian Maroski: drafting/revising the manuscript, study concept or design, analysis or interpretation of data, accepts responsibility for conduct of research and final approval, contribution of vital reagents/tools/patients.

Juri Katchanov: drafting/revising the manuscript, analysis or interpretation of data, accepts responsibility for conduct of research and final approval, acquisition of data. Gordian Branding: drafting/revising the manuscript, analysis or interpretation of data, accepts responsibility for conduct of research and final approval, acquisition of data. Frank Hamilton: analysis or interpretation of data, accepts responsibility for conduct of research and final approval, acquisition of data, study supervision.

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