Teaching *NeuroImages*: Acute neurologic deficits due to Baló concentric sclerosis

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Figure MRI reveals multiple concentric lesions with abnormal high T2 signal and varying degrees of restricted diffusion

The largest lesion was located in the subcortical white matter of the right parietal lobe. The lesions demonstrate concentric alternating high signals on (A) T2-weighted axial imaging that corresponded with restricted diffusion on the outermost ring on (B) diffusion-weighted imaging and (C) apparent diffusion coefficient map. Postcontrast T1-weighted imaging demonstrates faint, patchy enhancement of these lesions (not shown).

A previously healthy 40-year-old man developed acute left-sided weakness and numbness that progressed over 2 weeks. Physical examination revealed decreased sensation to pinprick in the left arm and

leg and left leg weakness. MRI supported a diagnosis of Baló concentric sclerosis (BCS), a rare demyelinating disease (figure). The concentric bands of differing intensities on MRI are due to alternating layers of

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normal and demyelinated tissue that is classically observed with BCS.^{1,2} Patients with BCS commonly present with acute neurologic symptoms, which can be due to a solitary lesion. The clinical course can be fulminant and progressive or benign. In the case presented, the patient's symptoms improved within 1 week of starting high-dose glucocorticoids.

AUTHOR CONTRIBUTIONS

Joshua Bakhsheshian: drafting/revising the manuscript, study concept or design, analysis or interpretation of data, accepts responsibility for conduct of research and final approval. Maya Srikanth: drafting/revising the manuscript, accepts responsibility for conduct of research and final approval. Audrey L. French: drafting/revising the manuscript, study concept or design, analysis or interpretation of data, accepts responsibility for conduct of research and final approval, acquisition of data.

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