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Teaching Neuro*Images*: MRI appearances of Lhermitte-Duclos disease

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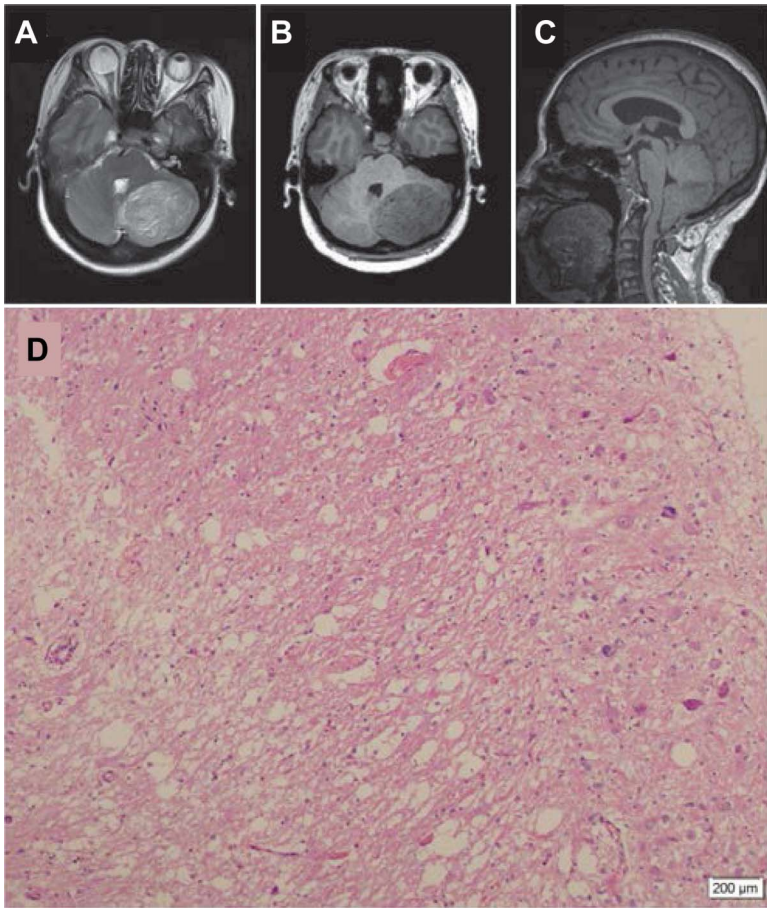
A 48-year-old woman was admitted with a 3-year history of intermittent dizziness and unstable gait. Cranial MRI demonstrated a laminated lesion of T2 hyperintensity and T1 hypointensity involving the left cerebellar hemisphere, which appeared enlarged (figure, A–C). Secondary hydrocephalus and Chiari I malformation were observed. Because the striated appearance on MRI was characteristic of Lhermitte-Duclos disease,[1] presurgical diagnosis was made. Total resection of this lesion was performed, and histopathologic evaluation confirmed the diagnosis (figure, D). Follow-up neuroradiologic studies revealed no recurrence. However, recent ultrasonography showed multiple nodules in the patient's right breast, which was

Figure MRI appearances and histopathologic examination



Axial T2- and T1-weighted MRIs (A, B) show the typical striated pattern with alternating bands characterizing Lhermitte-Duclos disease. Mild hydrocephalus and the inferiorly displaced cerebellar tonsil were noted on the sagittal T1-weighted image (C). Histopathologic study (D) (hematoxylin & eosin stain; scale bar = 200 μm) confirmed the MRI diagnosis.

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predictive of a confident clinical diagnosis of Cowden disease.[2]

AUTHOR CONTRIBUTIONS

Dr. Wei: drafting and revising the manuscript, study concept or design, study supervision. Dr. Liu: drafting and revising the manuscript, analysis or interpretation of data, study supervision. Dr. Wu, Dr. Kang, Dr. Li: study concept or design, acquisition of data.

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