

Teaching NeuroImages: MRI appearances of Lhermitte-Duclos disease

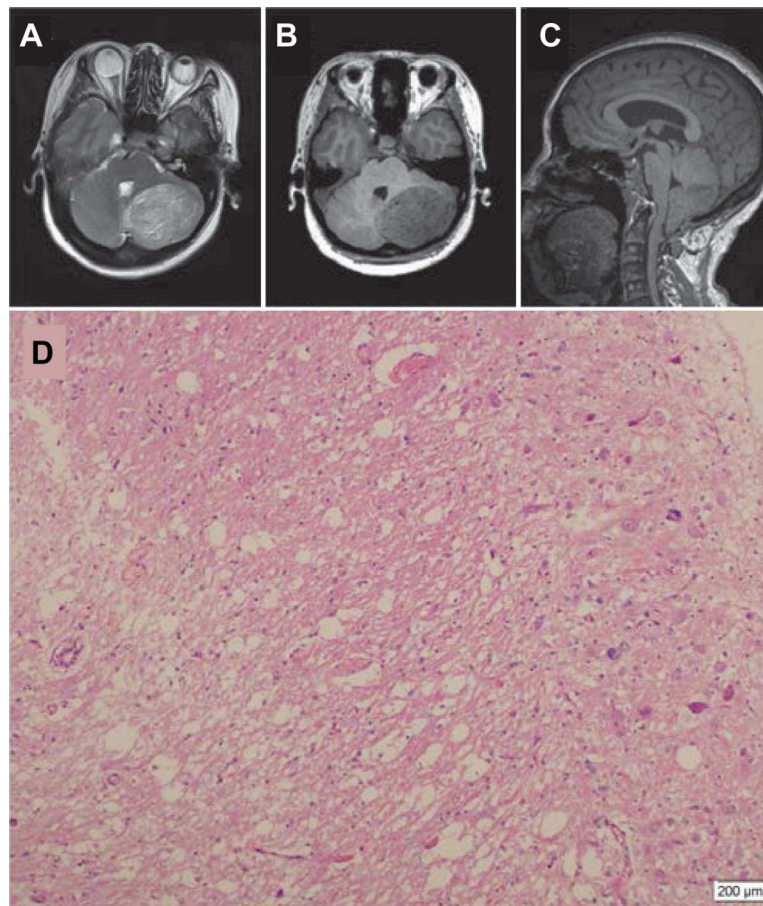
Guangquan Wei, MD,
PhD
Shujuan Liu, MD, PhD
Yuanming Wu, MD,
PhD
Xiaowei Kang, MD
Tianyun Li, MD

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

Correspondence to
Dr. Liu:
hanliu@fmmu.edu.cn

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.

From the Departments of Radiology and Molecular Imaging (G.W., X.K., T.L.) and Gynecology (S.L.), Xijing Hospital, and Center for Gene Typing (Y.W.), Fourth Military Medical University, Xi'an, China.

Go to Neurology.org for full disclosures. Funding information and disclosures deemed relevant by the authors, if any, are provided at the end of the article.

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.

STUDY FUNDING

No targeted funding reported.

DISCLOSURE

The authors report no disclosures relevant to the manuscript. Go to Neurology.org for full disclosures.

REFERENCES

1. Kulkantrakorn K, Awwad EE, Levy B, et al. MRI in Lhermitte-Duclos disease. *Neurology* 1997;48:725–731.
2. Robinson S, Cohen AR. Cowden disease and Lhermitte-Duclos disease: characterization of a new phakomatosis. *Neurosurgery* 2000;46:371–383.

Neurology[®]

Teaching *NeuroImages*: MRI appearances of Lhermitte-Duclos disease

Guangquan Wei, Shujuan Liu, Yuanming Wu, et al.

Neurology 2013;80:e67-e68

DOI 10.1212/WNL.0b013e3182815454

This information is current as of February 4, 2013

Updated Information & Services	including high resolution figures, can be found at: http://n.neurology.org/content/80/6/e67.full
References	This article cites 2 articles, 1 of which you can access for free at: http://n.neurology.org/content/80/6/e67.full#ref-list-1
Subspecialty Collections	This article, along with others on similar topics, appears in the following collection(s): All Pain http://n.neurology.org/cgi/collection/all_pain Gait disorders/ataxia http://n.neurology.org/cgi/collection/gait_disorders_ataxia Hydrocephalus http://n.neurology.org/cgi/collection/hydrocephalus MRI http://n.neurology.org/cgi/collection/mri Primary brain tumor http://n.neurology.org/cgi/collection/primary_brain_tumor
Permissions & Licensing	Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at: http://www.neurology.org/about/about_the_journal#permissions
Reprints	Information about ordering reprints can be found online: http://n.neurology.org/subscribers/advertise

Neurology® is the official journal of the American Academy of Neurology. Published continuously since 1951, it is now a weekly with 48 issues per year. Copyright © 2013 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.

