Teaching NeuroImages:

Diagnosis

Meningioma and...

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A previously healthy 64-year-old woman experienced rapidly progressing dysphasia, dementia, dystonia, and diplopia. A 4.5-cm frontotemporal meningioma was found on imaging (figure) and she was scheduled for surgery. Because her symptoms were not consistent with the meningioma location,¹ imaging was reviewed further. Presumptive diagnosis of Creutzfeldt-Jakob disease (CJD) was made and surgery for that afternoon was cancelled. Autopsy 1 month later demonstrated prion protein scrapie (PrPsc), confirming CJD. The meningioma presented a potential satisfaction-of-search error. Surgery would have risked infection to those exposed, as PrPsc is highly resistant to denaturation even at autoclave temperatures.²

AUTHOR CONTRIBUTIONS

Diane Wang: drafting/revising the manuscript, analysis or interpretation of data, accepts responsibility for conduct of research and final approval.
Shaminta Hamindian: drafting/revising the manuscript, analysis or

interpretation of data, accepts responsibility for conduct of research and final approval, acquisition of data, study supervision. Jerome B. Posner: analysis or interpretation of data, accepts responsibility for conduct of research and final approval, acquisition of data. Robert J. Young: 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, study supervision.

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DISCLOSURE

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Figure Meningioma presents potential for satisfaction-of-search error

Axial (A) fluid-attenuated inversion recovery (FLAIR), (B) contrast T1, (C) diffusion-weighted imaging, and (D) apparent diffusion coefficient images show an enhancing meningioma along the left frontotemporal convexity with mild diffusion restriction due to hypercellularity. There are also bilateral FLAIR hyperintense diffusion-restricted lesions in the basal ganglia, temporal, and occipital lobes with classic cortical ribbon pattern, consistent with Creutzfeldt-Jakob disease.

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