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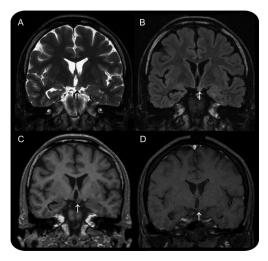
## Teaching Video Neuro *Images*: Hypothalamic hamartoma

An overlooked entity

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Figure 1 Brain MRI (1.5 T)



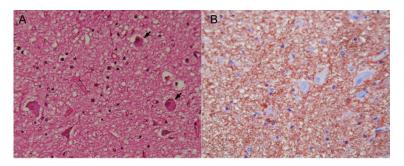
Coronal MRI showing small well-defined sessile lesion measuring  $0.78 \times 0.48$  cm in the anterior aspect of interpeduncular fossa of left tuber cinereum, (A) isointense to gray matter on T2-weighted image (black arrow); (B) hyperintense on fluid-attenuated inversion recovery image (white arrow); (C) isointense to gray matter on T1-weighted image (white arrow); (D) nonenhancing on postgadolinium contrast imaging.

A 21-year-old man presented with brief spells of inappropriate laughter since 6 years of age. Three gelastic seizures were recorded during video-EEG monitoring (video on the *Neurology*® Web site at www.neurology. org). MRI revealed a small hypothalamic hamartoma (figure 1). Gelastic seizures can also arise from temporal lobe and mesial frontal regions. Meticulous scrutiny of MRI is needed since epileptogenic hamartomas may be small and nonpedunculated, and therefore easily missed. Surgical removal of hamartoma is very effective in controlling seizures. Histopathology shows variable-sized nodular foci of neurons as well as areas of diffusely distributed neurons interspersed among glial cells without dysplastic neurons (figure 2).

## **REFERENCES**

- Arroyo S, Lesser RP, Gordon B, et al. Mirth, laughter and gelastic seizures. Brain 1993;116:757–780.
- Berkovic SF, Arzimanoglou A, Kuzniecky R, Harvey AS, Palmini A, Andermann F. Hypothalamic hamartoma and seizures: a treatable epileptic encephalopathy. Epilepsia 2003;44:969–973.

Figure 2 Photomicrograph (400×)



(A) Hematoxylin & eosin stain showing discrete neurons (black arrows) and diffusely scattered stellate cells supported on a fibrillary matrix. (B) Immunohistochemistry with glial fibrillary acidic protein stain showing glial fibers (brown) interspersed with discrete neurons of variable size and shape.

Supplemental data at www.neurology.org

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