Teaching Video NeuroImages:

Hypothalamic hamartoma

An overlooked entity

Neeraj N. Baheti, DM
Ajith Cherian, DM
Ramshekhar Menon,
DM
Ashalatha Radhakrishnan,
DM

Address correspondence and
reprint requests to Dr. Ashalatha
Radhakrishnan, Department of
Neurology, Sree Chitra Tirunal
Institute for Medical Sciences and
Technology, Trivandrum, Kerala,
India 695011
drashalatha@sctimst.ac.in

Figure 1 Brain MRI (1.5 T)

Coronal MRI showing small well-defined sessile lesion measuring 0.78×0.48 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.¹ 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.² 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

1. Arroyo S, Lesser RP, Gordon B, et al. Mirth, laughter and gelastic seizures. *Brain* 1993;116:757–780.
2. 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

From the Department of Neurology, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum, Kerala, India.

Disclosure: The authors report no disclosures.

Neurology[®]

Teaching Video *NeuroImages*: Hypothalamic hamartoma: An overlooked entity

Neeraj N. Baheti, Ajith Cherian, Ramshekhar Menon, et al.

Neurology 2011;76:e26

DOI 10.1212/WNL.0b013e31820b761a

This information is current as of February 7, 2011

Updated Information & Services	including high resolution figures, can be found at: http://n.neurology.org/content/76/6/e26.full
Supplementary Material	Supplementary material can be found at: http://n.neurology.org/content/suppl/2011/02/06/76.6.e26.DC1
References	This article cites 2 articles, 0 of which you can access for free at: http://n.neurology.org/content/76/6/e26.full#ref-list-1
Subspecialty Collections	This article, along with others on similar topics, appears in the following collection(s): All Clinical Neurology http://n.neurology.org/cgi/collection/all_clinical_neurology All Epilepsy/Seizures http://n.neurology.org/cgi/collection/all_epilepsy_seizures EEG; see Epilepsy/Seizures http://n.neurology.org/cgi/collection/eeg_see_epilepsy-seizures MRI http://n.neurology.org/cgi/collection/mri
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 Copyright © 2011 by AAN Enterprises, Inc.. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.