Teaching Video NeurolImage: Electroclinical characteristics of micturition-induced reflex epilepsy

Chaturbhuj Rathore,
MD
Ashalatha
Radhakrishnan,
MD
S. Dinesh Nayak, MD
Kurupath
Radhakrishnan,
MD, FAAN

Address correspondence and
reprint requests to Dr. K.
Radhakrishnan, Department of
Neurology, Sree Chitra Tirunal
Institute for Medical Sciences
and Technology, Trivandrum-
695 011, Kerala, India
krk@scitimst.ac.in

A 6-year-old boy presented with seizures since the age of 3 years characterized by sudden extension of the upper extremities and a tendency to fall forward; each seizure was induced by micturition. The ictal EEG during these seizures showed 20 Hz beta activity followed by 2 Hz spike-wave discharges confined to the Cz electrode (figure, video).

Among the six patients with micturition-induced seizures documented so far in the literature, a midline or right medial frontal epileptogenic focus has been consistently documented.¹ Although a

high resolution MRI in our patient failed to define any focal abnormality, presence of an occult hyperexcitable dysplastic lesion cannot be excluded.²

REFERENCES

1. Okumura A, Kondo Y, Tsuji T, et al. Micturition induced seizures: ictal EEG and subtraction ictal SPECT findings. *Epilepsy Res* 2007;73:119–121.
2. Palmini A, Halasz P, Scheffer IE, et al. Reflex seizures in patients with malformations of cortical development and refractory epilepsy. *Epilepsia* 2005;46:1224–1234.

Figure Stills from video-EEG recording

1) Micturating; 2) forward flexion of upper trunk and extension of upper extremities, and a beta burst (arrow) at Cz electrode; 3) fall and attenuation of the EEG activity (arrow); and 4) rhythmic 2 Hz spike and wave discharges at Cz electrode during postictal phase.

Supplemental data at
www.neurology.org

From the R. Madhavan Nayar Center for Comprehensive Epilepsy Care, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum, Kerala, India.

Disclosure: The authors report no disclosures.

Neurology[®]

Teaching Video *NeuroImage*: Electroclinical characteristics of micturition-induced reflex epilepsy

Chaturbhuj Rathore, Ashalatha Radhakrishnan, S. Dinesh Nayak, et al.

Neurology 2008;70:e86

DOI 10.1212/01.wnl.0000312283.88683.0d

This information is current as of May 12, 2008

Updated Information & Services

including high resolution figures, can be found at:
<http://n.neurology.org/content/70/20/e86.full>

Supplementary Material

Supplementary material can be found at:
<http://n.neurology.org/content/suppl/2008/05/09/70.20.e86.DC1>

References

This article cites 2 articles, 0 of which you can access for free at:
<http://n.neurology.org/content/70/20/e86.full#ref-list-1>

Citations

This article has been cited by 1 HighWire-hosted articles:
<http://n.neurology.org/content/70/20/e86.full##otherarticles>

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 . All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.