

## Prominent eye muscle artefact on the EEG of a patient with Hashimoto thyroiditis with primary hypothyroidism

Irma Liezl Reyes<sup>1</sup>, Douglas R. Nordli<sup>1</sup>

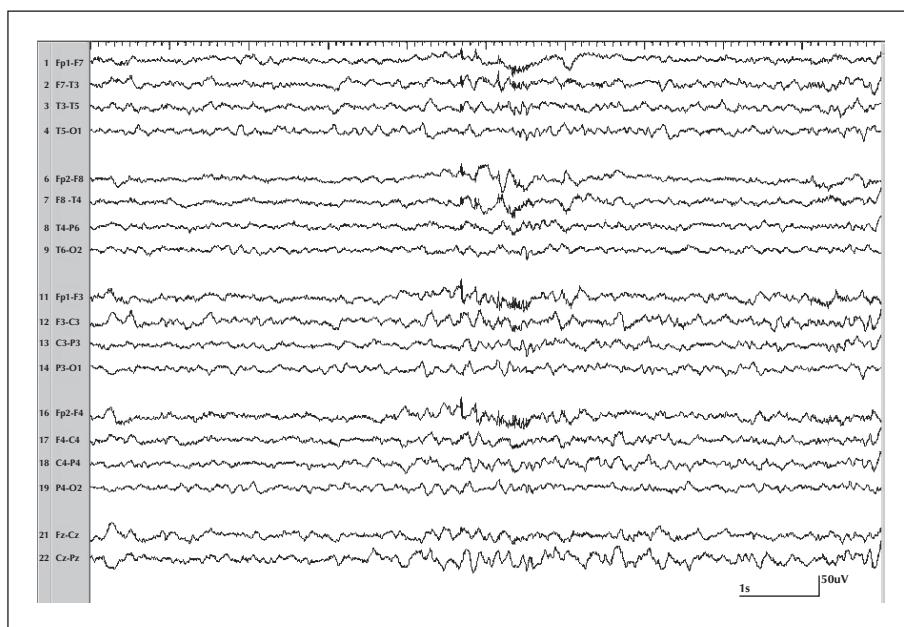
<sup>1</sup>Children's Hospital of Los Angeles - Neurology, Los Angeles, California 90027-6016, USA

**Key words:** Hashimoto thyroiditis; EEG artefacts.

**Correspondence:** irreyes@chla.usc.edu

For details visit the Multimedia Teaching Material/**EEG** Section of the website [www.epilepticdisorders.com](http://www.epilepticdisorders.com).

A 15-year-old boy with Hashimoto's thyroiditis presented with a paroxysmal episode. The EEG demonstrated prominent superior and lateral rectus muscle artefacts, superimposed on a normal background. Since seizures are known to occur in patients with thyroiditis, correct interpretation of the interictal EEG was very important. Initially, the frontal discharges may have been mistaken for epileptiform discharges. However, the morphology was more consistent with muscle artefact and the restricted field was consistent with an extracerebral source generator. Eye muscle changes caused by thyroiditis may have produced the prominent voltages of the artefact.



## MULTIMEDIA TEACHING MATERIAL

To better serve its mission as the educational journal of the International League Against Epilepsy, **Epileptic Disorders** created on its website ([www.epilepticdisorders.com](http://www.epilepticdisorders.com)) a MULTIMEDIA teaching section.

In this section, epileptologists are invited to contribute to the multimedia libraries of: short educational videos on specific aspects of semiology of epileptic seizures and electro-clinical features of epilepsy syndromes; structural and/or functional neuroimaging and neuropathology images related to epilepsy; EEG and MEG figures; and videos or images of neurosurgical techniques.

The structure of the multimedia submissions should be conceived for educational purposes. Alongside the multimedia material, authors are requested to submit a title and a short abstract (not more than 100 words) summarising the main message, as well as the subtitles of the video sequences or images included and the corresponding key words. Submissions are made via the submission platform: [mc.manuscriptcentral.com/epilepticdisorders](http://mc.manuscriptcentral.com/epilepticdisorders), under the manuscript type *Multimedia Teaching Material*, and are peer reviewed.

All Multimedia Teaching Material will be constantly and freely accessible on our website.