

# Dyshormia in focal epilepsy

## Disormia em Epilepsia Focal

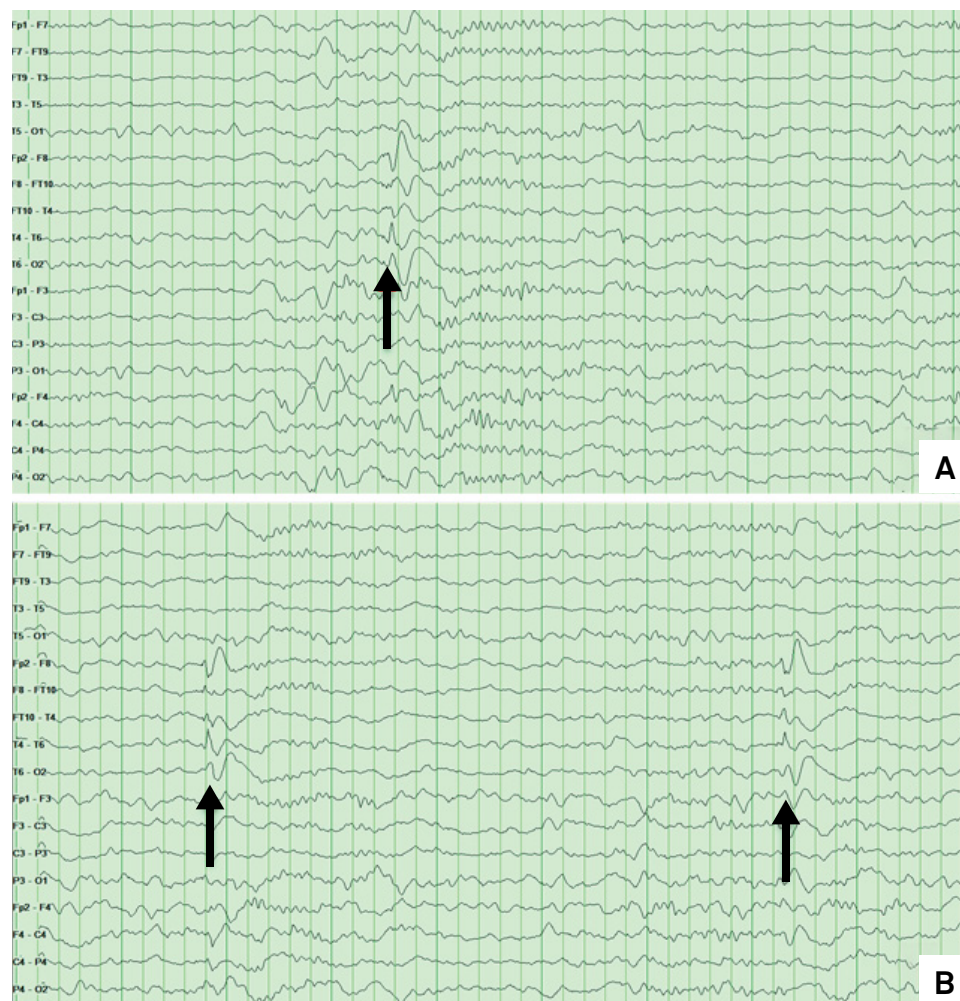
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A 37-year-old man was evaluated for recurrent episodes of impaired awareness since childhood. EEG showed right temporal focal dysormia (Figure 1). MRI revealed a right temporal mass (Figure 2).

Niedermeyer coined the term “dyshormia” to define epileptiform discharges that occur in conjunction with K-complexes on arousal from sleep<sup>1</sup>. Although dyshormia

was originally described in generalized epilepsies<sup>1</sup>, unilateral, focal dyshormia is occasionally seen in focal epilepsies<sup>2</sup>.

In focal epilepsies, epileptiform discharges associated with K-complexes are typically ipsilateral to the epileptogenic zone, and are more common in frontal than in temporal lobe epilepsies<sup>2</sup>. Their presence can assist in localization of epileptogenic regions.



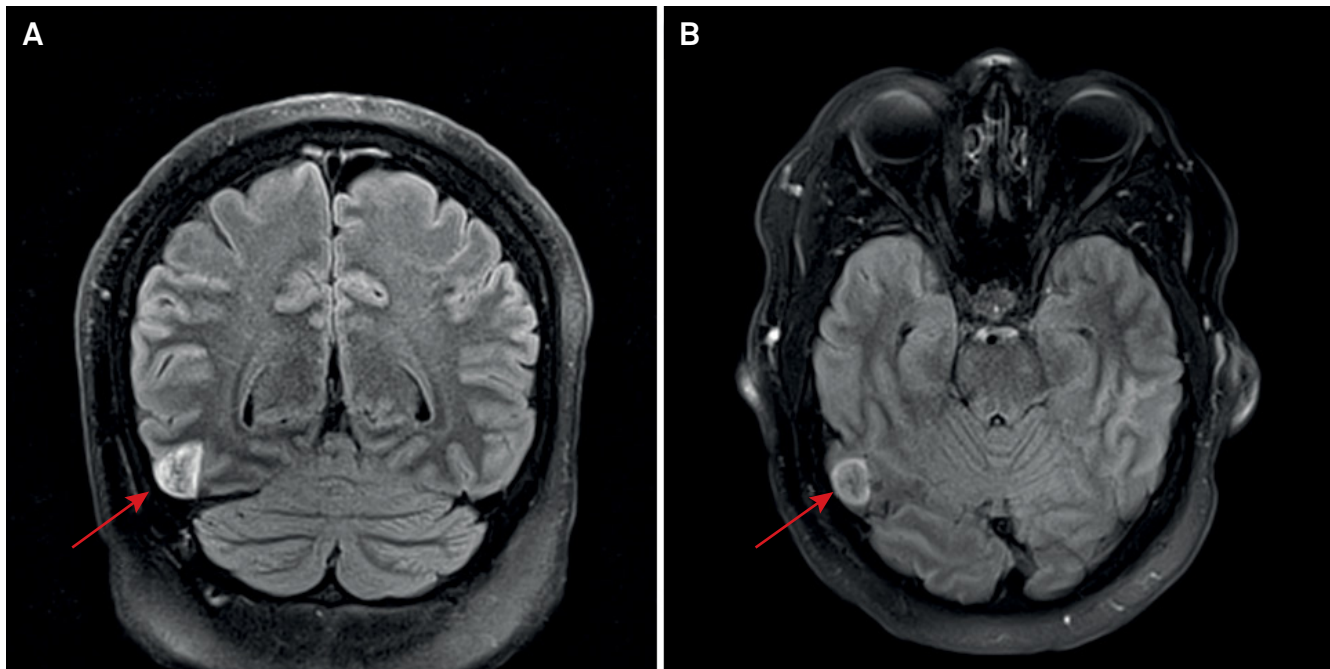
**Figure 1.** Electroencephalographic abnormalities in focal dysormia. A) and B) Right temporal epileptiform K-complexes during N2 sleep (arrows).

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**Figure 2.** Neuroimaging showing a right temporal mass. A) coronal and B) axial non-contrast T2-FLAIR-weighted brain MRI shows a hyperintense right posterior temporal lobe lesion with heterogeneous internal signal (arrows). Pathology revealed a dysembryoplastic neuroepithelial tumor, WHO grade I.

## References

1. Niedermeyer E. Epileptiform K complexes. *Am J Electroencephalogr Technol.* 2008 Mar;48(1):48-51.
2. Geyer JD, Carney PR, Gilliam F. Focal epileptiform spikes in conjunction with K-complexes. *J Clin Neurophysiol.* 2006 Oct;23(5):436-9. <https://doi.org/10.1097/01.wnp.0000228499.92313.d6>