A 37-year-old man was evaluated for recurrent episodes of impaired awareness since childhood. EEG showed right temporal focal dyshormia (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. Although dyshormia was originally described in generalized epilepsies, unilateral, focal dyshormia is occasionally seen in focal epilepsies.

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. Their presence can assist in localization of epileptogenic regions.

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