Nocturnal groaning (catathrenia) and epilepsy

Jan Zinke, Sven Rupprecht, Matthias Schwab, Georg Hagemann
Hans Berger Clinic for Neurology, University Hospital Jena, Germany
Received March 2, 2010; Accepted April 29, 2010

ABSTRACT – We report the case of a patient with idiopathic generalized epilepsy who ten years after the onset of his epilepsy also developed recurring nocturnal paroxysmal episodes reminiscent of his seizure semiology. Video monitoring and polysomnography revealed episodes of nocturnal groaning. Escalation of antiepileptic treatment was avoided. [Published with video sequences]

Key words: differential diagnosis, epilepsy, parasomnia, nocturnal groaning

A 22-year-old male suffering from seizures was treated with a daily dose of 1,500 mg valproate. The seizures started at the age of 11 years and initially were characterized by staring, hand movements, and impaired consciousness which occurred once a week during daytime. Additionally, the family reported nocturnal episodes with groaning, more violent jerking of arms and legs, loss of consciousness, and enuresis which were considered to be generalised seizures. Repeated interictal EEGs showed only generalised slowing without epileptiform activity or focal abnormalities. He was clinically diagnosed with idiopathic generalised epilepsy and after treatment the frequency and severity of his seizures abated with only a few generalised nocturnal seizures being witnessed in recent years.

On admission to our unit, his parents reported recurring episodes, which sounded like earlier seizures, coming from the patient’s bedroom. Upon entering the bedroom, they found their son sleeping normally without any signs of a seizure. A polysomnography revealed REM-associated episodes of nocturnal groaning without any further abnormalities (figure 1; see video sequence).

Nocturnal groaning, or catathrenia, is a rare condition classified as parasomnia (AASM, 2005; Vetrugno et al., 2001) which does not usually require treatment. Therefore, no change of treatment was necessary for this patient. Catathrenia has not previously been reported to be associated with epilepsy and it is unknown whether there is any relationship between these entities. Therefore, for the time being, catathrenia should be considered as a differential diagnosis of nocturnal seizures. Video monitoring or polysomnography in patients with any suspicion of a change in semiology or newly encountered strange nocturnal episodes may be warranted in order to guide or prevent additional therapy which may be potentially harmful or ineffective.

Disclosure. None of the authors has any conflict of interest to disclose.
Figure 1. Polysomnography shows REM-associated episodes of nocturnal groaning without EEG abnormalities.

Legend for video sequence
Polysomnographic recording showing an episode of nocturnal groaning. REM sleep was followed by arousal with deep inspiration and prolonged expiration associated with the typical groaning. Channels from top to bottom: electrooculogram (2 channels), electroencephalogram (4 channels), submental electromyogram, electrocardiogram, tibial electromyogram (2 channels), microphone, oronasal flow, thoracic and abdominal movements, oxygen saturation, pulse, body position.

References