uous positive airway pressure. The frequency and severity of the obstructive sleep apnea declined after tonsillectomy and adenoidectomy. Complete cessation of seizures and severe apnea was reached by oxygen saturation monitoring with alarm devices and antiepileptic therapy with clonazepam and later with clobazam.

We suggest that in familial dysautonomia and other conditions typically associated with seizures and sleep disorders, continuous sleep polygraphs and EEG records with FiO_2 measurements should be obtained, and treatment of the sleep disorder should be considered before antiepileptic therapy.

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To the Editor: We would like to emphasize the importance of sleep apnea as a risk factor for different neurologic diseases.

Devinsky et al¹ describe the association between frequency and severity of epileptic seizures and sleep apnea. This is interesting, since there is a well-known exacerbation of epilepsy by sleep deprivation and patients with sleep apnea may have partial sleep deprivation.

Although the "coincidence" of sleep apnea (prevalence, 1 to 2%) and epilepsy (prevalence, 0.5%) is low (only 0.1%), there are the following problems: (1) risk of chronic hypoxia (especially during the night); (2) risk of muscle relaxation by some anticonvulsant medications; (3) risk of sleep disturbance in apnea (preponderance of stage 1 or 2, and frequent shift of stages) for occurrence of seizures; and (4) hypoxemia as a causative factor for epileptiform discharges or seizures.

We observed 13 patients (eight men, five women; ages 30 to 71 years) with seizures and sleep apnea. Six patients had generalized tonic-clonic seizures and seven had partial complex seizures; nine suffered from daytime sleepiness; and 11 were snoring. The number of desaturations was between 13 and 498 per night, with lowest desaturation values lying between 27 and 91%. In eight of 13 patients, the apnea index was ≥ 10 ; four patients had phenobarbital therapy.

There is also evidence in some cases that treatment of sleep apnea improved the course of epilepsy.² There is still little known about ultradian correlation of sleep apnea severity and clusters of seizures. Since partial complex seizures showed higher Broca indices and more desaturations than generalized tonic-clonic seizures in our patients, there might be a different risk factor in

these groups of epilepsies. The coincidence of epilepsy and sleep apnea is probably underestimated, and the increase of epilepsy in elderly persons with "vascular pathology" is a challenge to neurologists. Partial sleep deprivation² caused by apneas and chronic hypoxia³ may be the main risk factors for seizure activity.

Therefore, sleep studies are of great importance for neurologists, and it would appear insufficient to consider only the pulmonary aspects of sleep apnea.

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Reply from the Author: The observation by Zelnik and Saltz that sleep apnea triggered anoxic convulsions in a patient with familial dysautonomia is important and implicates another mechanism for seizures in these patients. In our experience, the most common cause of convulsions in patients with familial dysautonomia is autonomic dysfunction depressing heart rate or blood pressure, or causing fluid loss and dehydration, leading to convulsive syncope. Also, approximately 5% of familial dysautonomia patients develop hyponatremic seizures.⁴

Zeitlhofer et al report 13 cases with seizures and sleep apnea. Like our patients, some of their patients had a reduction in seizure frequency with treatment of the sleep apnea. We agree with their points, as stated in our article, that sleep deprivation is probably the major factor by which sleep apnea exacerbates epilepsy and that comorbid sleep disorders deserve greater attention in neurologic disorders such as epilepsy.

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Correction

In "Inclusion body myositis: Explanation for poor response to immunosuppressive therapy" by Barohn et al, which appeared in the July issue (*Neurology* 1995;45:1302-1304), an error appeared in the Methods section in the description of the functional disability scores. Grade 2 should read "2 = able to walk 30 feet without assistance but unable to run."

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Correction

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