Repeated Polysomnograms After Antiinflammatory Therapy of Mild Pediatric OSA

To the Editor:

We read the recent article in *CHEST* (July 2014) by Kheirandish-Gozal et al¹ with great interest. Over the past 2 decades, there have been several publications on the use of antiinflammatory medications for the treatment of mild OSA in children. Taken together, they provide increasingly compelling evidence that, at least for a select subset of patients, our medical field may need to undergo a paradigm shift from a surgical to a medical approach for the treatment of this relatively common condition.

The authors made a significant contribution to the available literature, as their article is the most robust to date in terms of both the breadth (ie, large number of subjects) and the depth (ie, performing serial polysomnograms). We agree with the authors' conclusion that a multicenter randomized trial is needed to further corroborate these results, but, in the meantime, we are hoping that the authors would be able to shed some light on a specific aspect of this treatment approach that has not been adequately addressed in the literature. Several authorities in this medical field, such as Marcus,² proposed that it may be necessary to routinely perform polysomnography on patients treated with antiinflammatory medications due to the inherent limitations of the clinical evaluation in correctly identifying patients with OSA. We respectfully ask the current authors if they could address this question given the data they collected for this article, namely, what was the reliability of the post-treatment symptoms in discriminating between persistence or resolution of OSA on the posttreatment polysomnograms?

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Response

To the Editor:

We greatly appreciate the favorable comments of Drs Traeger and Prashad regarding our clinical experience using antiinflammatory therapy in children with mild OSA as an alternative to surgical adenotonsillectomy (T&A).¹ They raise a major and pertinent clinical question as to whether persistence or changes in clinical symptoms associated with treatment can guide the need for a follow-up polysomnographic evaluation after completion of treatment or guide the need for continued antiinflammatory treatment or alternative treatments. Because of the retrospective nature of our study, we are clearly unable to formulate a scientifically valid answer to this query. However, some of our previous studies focused on T&A for pediatric OSA would suggest that the presence or absence of clinical symptoms after treatment are markedly unreliable in the identification of residual OSA, while also suggesting specific high-risk groups that are more likely to exhibit residual OSA after T&A (eg, presence of obesity, older age, severe OSA pre-T&A).²⁻⁴ Furthermore, we would strongly endorse implementation of coordinated multicenter efforts aimed at delineating instruments that incorporate both symptoms and physical findings in the pursuit of not only the diagnosis of OSA but also the presence of residual OSA after treatment.⁵

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