Letter to the Editor

In Reference to *Does Drug-Induced Sleep Endoscopy Affect Surgical Outcomes? A Multicenter Study of 326 Obstructive Sleep Apnea Patients* 

Dear Editor:

I read with great interest the article by Pang et al. titled, “Does Drug-Induced Sleep Endoscopy Affect Surgical Outcomes? A Multicenter Study of 326 Obstructive Sleep Apnea Patients.” This study has many important strengths, but I am concerned that their omission of tonsil size in the analyses limits their findings.

Numerous studies have shown that the most important patient-specific factor associated with surgical outcomes is tonsil size, whether for markedly enlarged (3+/4+) tonsils in palate surgery/tonsillectomy alone or for smaller/absent (0–2+) tonsils in a cohort undergoing drug-induced sleep endoscopy (DISE) and upper airway surgery. There is something of a dose–response association between tonsil size and surgical outcomes, with outcomes for patients with 3+/4+ > 2+ > 1+ > absent tonsils. The recent publication indicates that tonsil size information was collected, and in the Discussion, the authors share that the proportion of markedly enlarged tonsils was low but not trivial (15% in the no-DISE group and 18% in the DISE group). However, there was no presentation of the distribution across the spectrum of tonsil size and, more importantly, no incorporation of tonsil size in the univariate or multivariate analyses.

Similarly, the large study population also may have allowed for statistical adjustment for type of surgery rather than simply comparing types of procedures across the two groups.

I applaud the authors for assembling this large, multicenter cohort, as single-center studies generally have inadequate sample size to answer complex questions in sleep surgery and DISE, in particular. In this vein, we have previously published a different multicenter cohort study of 275 participants, showing an association between surgical outcomes and certain preoperative DISE findings, based on blinded reviewer assessments. In our study, partial or complete oropharyngeal lateral wall-related obstruction was associated with lower odds of surgical response, and complete tongue-related obstruction was associated with lower odds of surgical response, with a possible (limited by sample size even in this somewhat large cohort) benefit for tongue resection procedures in the latter group.

DISE is not a magical cure-all. Simply performing DISE does not improve patient outcomes, and this study highlights that fact. At the same time, this study does not show clearly that DISE cannot improve surgical outcomes. DISE is an evaluation technique that must be performed properly, with findings that must be integrated with the clinical picture (including tonsil size) in an effort to improve results.

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BIBLIOGRAPHY


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