

PubMed ▼

## Abstract

Full text links



Otolaryngol Head Neck Surg. 2015 Jun 4. pii: 0194599815586978. [Epub ahead of print]

## Drug-Induced Sedation Endoscopy in the Evaluation of OSA Patients with Incomplete Oral Appliance Therapy Response.

Kent DT<sup>1</sup>, Rogers R<sup>2</sup>, Soose RJ<sup>3</sup>.

### Author information

### Abstract

**OBJECTIVE:** To use drug-induced sedation endoscopy (DISE) to identify locations and patterns of residual collapse in patients with obstructive sleep apnea (OSA) with incomplete response to oral appliance therapy (OAT).

**STUDY DESIGN:** Case series with chart review.

**SETTING:** Academic multidisciplinary sleep practice.

**SUBJECTS AND METHODS:** Thirty-five consecutively screened adult patients with OSA with continuous positive airway pressure (CPAP) intolerance and incomplete response to OAT (apnea-hypopnea index [AHI] >15 or AHI >5 with persistent subjective symptoms) who underwent DISE with and without the oral appliance. Data collected included demographics, body mass index, polysomnography data, and management decisions after DISE. Each DISE video pair was retrospectively scored using the VOTE classification system by the same blinded reviewer (R.J.S.).

**RESULTS:** All patients had multilevel airway collapse at baseline. The palate was the most common location of OAT failure. Fifteen (42.9%) had persistent collapse of the velum during DISE with OAT, and 7 (20%) had persistent collapse of the epiglottis. Twenty-three (65.7%) patients were offered targeted surgery based on DISE findings to augment OAT effectiveness. Twenty (57.1%) patients underwent additional medical therapy such as OAT adjustment or cervical positional therapy. Mean AHI was reduced from 37.4 at baseline, to 16.4 with OAT ( $P < .01$ ), and to 10.7 after post-DISE intervention ( $P < .78$ ).

**CONCLUSION:** In patients with incomplete response to OAT, DISE with and without the appliance can identify residual anatomical locations of collapse, which may direct additional medical and surgical treatment options to augment OAT effectiveness. Further work is needed to determine if DISE affects outcomes.

© American Academy of Otolaryngology—Head and Neck Surgery Foundation 2015.

**KEYWORDS:** continuous positive airway pressure; drug-induced sedation endoscopy; obstructive sleep apnea; oral appliance

---

## LinkOut - more resources



---

## PubMed Commons

[PubMed Commons home](#)

0 comments

[How to join PubMed Commons](#)