

# Drug-Induced Sleep Endoscopy (DISE): An Essential Examination for Non-Adherent OSA Patients

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### **INTRODUCTION**



Identifying the precise location of upper airway obstruction is a significant challenge in the surgical treatment of Obstructive Sleep Apnea (OSA). Drug-Induced Sleep Endoscopy (DISE) has emerged as the preferred technique for diagnosing both anatomical and dynamic collapsible areas in sedated patients with OSA.

#### **CLINICAL CASE**



A 38-year-old male

Body mass index (BMI) of 31 kg/m2

History of smoking

Sleep study:

✓ Apnea + Hypopnea (A+H) Index of 10.9/h, with supine A+H of 25.1/h and non-supine A+H of 5.8/h;

 $\checkmark$  Oxygen saturation during sleep was recorded at 91.5%, with 7.4% saturation falling below 90%.

Due to his symptomatic presentation and high cardiovascular risk, the patient was initiated on auto-adjusting positive airway pressure (APAP) therapy and received guidance on improving sleep quality.

Unfortunately, despite multiple adaptation sessions and attempts with various interfaces, the patient was unable to tolerate



A referral to an otorhinolaryngologist was made, and the patient underwent Drug-Induced Sleep Endoscopy (DISE).

## **DISE FINDINGS**

- Significant collapse in the supine position with one pillow, with velum 80% circumferential collapse and epiglottic 100% anteroposterior collapse and trapdoor.
- $\checkmark$  No collapse observed in the oropharynx or tonsils, and the tongue base did not collapse.
- ✓ The jaw thrust maneuver resulted in a complete improvement.
- No mouth breathing, mandibular drop, or deviations of the nasal septum were observed, suggesting a suitable surgical intervention.



#### **CONCLUSION**



DISE is a safe, easily performed, and highly informative procedure for OSA patients. Its ability to identify specific collapse patterns and anatomical factors helps tailor individualized treatments in this heterogenous condition where adherence and compliance play crucial roles.



