Comprehensive Sleep Apnea Care: Can the Otolaryngologist Do It All?

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Background

- Continuous positive airway pressure (CPAP) is the initial treatment modality for obstructive sleep apnea (OSA)
- Patient adherence with this modality is as low as 30-60%
- Historically, CPAP has been managed by sleep medicine and primary care providers
- Referral to an otolaryngologist only occurs after failure of CPAP treatment
- Here, we present our institutional experience with patients newly diagnosed with OSA within the sleep surgery clinic
- We hypothesize that comprehensive sleep care, including medical management of OSA, can be accomplished by an otolaryngologist through a division of sleep surgery

Methods

- Retrospective chart review was performed to identify patients seen by a single sleep surgeon at our tertiary care center
- Identified patients included in the analysis were prescribed CPAP between December 2021 and October 2022
- Consecutive patients with initiation of CPAP therapy were included for analysis
- The medical record was reviewed for patient demographics, sleep study and CPAP compliance data, clinical visit information, and alternative OSA therapies
- Mean disease alleviation was calculated by multiplying the percentage apnea-hypopnea index (AHI) reduction with nightly duration of CPAP use relative to total sleep time

Discussion

- Among patients prescribed CPAP therapy in the sleep surgery clinic, 67% were compliant
- CPAP compliance rates in the literature range from 30-60%
- Twenty-five percent of total patients, and one-third of non-compliant patients, pursued subsequent alternative therapy
- CPAP prescription by the Otolaryngologist is a feasible and effective treatment approach with high rates of compliance

Results

- Thirty-six patients met inclusion criteria
- Patient demographics depicted in Table 1

Variable	
Age	53.8 ± 13.2
Male	25 (69%)
BMI	31.8 ± 5.4
Severe OSA	18 (50%)
Pretreatment AHI/REI	35.8 ± 25.8
Pretreatment oxygen nadir	75.9% ± 9.3%

Table 1. Demographics

Pretreatment demographics and other patient information.

- Overall 81% of patients underwent treatment (CPAP compliant or surgical disease management)
- Mean disease alleviation was 58.8%
- Other post-treatment outcomes presented in Table 2

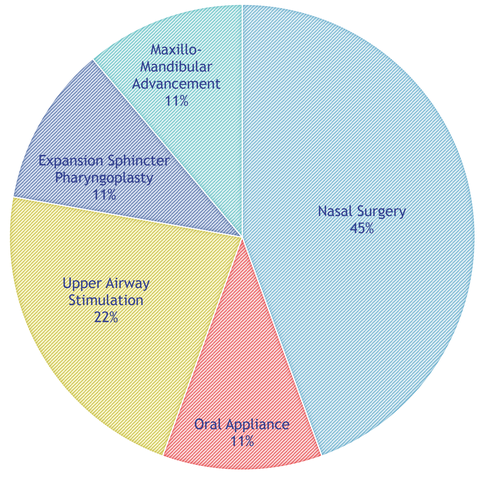
Treatment Compliance Rate	81%
CPAP Compliance Rate	67%
Mean 30-day CPAP Compliance Rate	71.4%
Mean AHI using CPAP	2.1 events/hour
Mean Disease Alleviation	59%
Alternative/Additional Therapy Rate	25%
Alternative Therapy Rate for Non-Adherent Patients	33%

Table 2. Post-treatment Outcomes

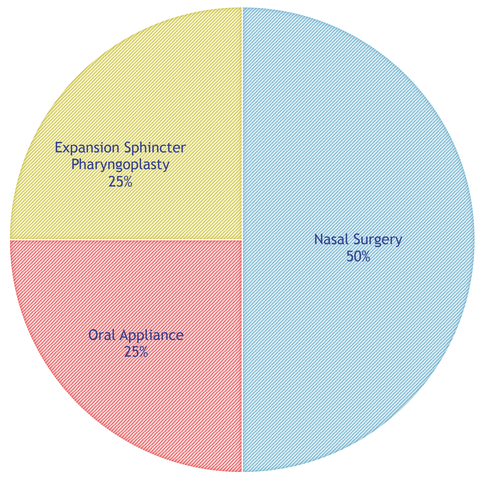
CPAP compliance and alternative therapy data.

- Nine patients (25.0%) pursued alternative or additional therapy
- Alternative therapies included upper airway stimulation, expansion sphincter pharyngoplasty, oral appliance therapy, or nasal surgery to improve CPAP tolerability
- Of note, 33% (4/12) of patients who were non-adherent to CPAP therapy opted to pursue alternative treatment options

ALTERNATIVE/ADDITIONAL THERAPY IN ALL PATIENTS



ALTERNATIVE THERAPY IN NON-ADHERENT PATIENTS



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