

ENT NEWS

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Update on Treatment for Snoring and Obstructive Sleep Apnea

Over the past couple decades, there has been significant advances in both the diagnosis and treatment of sleep disorders and obstructive sleep apnea. In fact, what was once considered a social annoyance is now recognized as a serious medical condition, with potential long term and life threatening side effects if left untreated. It is also clear that sleep disorders run a wide spectrum, from simple snoring, upper airway resistance syndrome (UARS), to obstructive sleep apnea (OSA). OSA itself is categorized according to the apnea/hypopnea index score on polysomnogram, ranging from mild (10-19 events/hr), moderate (20-39), to severe (40 and above). With changing concepts and treatment options, it remains important to have a good plan for addressing snoring and OSA.

Evaluation:

As with any problem, evaluation begins with a comprehensive history and exam. Pertinent history points include sleeping patterns, use of alcohol and sedatives, witnessed snoring and apnea, morning headaches, and daytime somnolence. Questionnaires like the Epworth Sleepiness Scale (see panel) can be helpful. Since moderate to severe OSA is almost always a multi-level obstructive problem, an exam must try to locate the level of the upper airway causing obstruction. Using nasal fiberoptic evaluation, an ENT physician can perform the "Mueller maneuver," observing the airway while reclined and creating negative pressures and identifying areas of collapse. Of course, a polysomnogram or sleep study is crucial to quantify the severity of apnea.

Treatment:

For mild to severe OSA, the first option is almost always a CPAP trial. Not only is CPAP 98% effective if worn correctly, it has few risks or complications. In addition, many insurance companies require a CPAP trial prior to considering coverage for other treatment options. Newer CPAP units are becoming available that can automatically titrate the pressure. Unfortunately, compliance with CPAP remains poor, with long term use less than 30 %.

Advances in Surgical Treatment:

For CPAP failure, surgical treatment remains a viable option. While earlier studies showed poor long term surgical results, more recent studies from Stanford University addressing multiple levels in a stepwise protocol offer very encouraging results. Recent advances include:

-Targeting hypopharyngeal airway by "hyoid suspension" or "thyrohyoidopexy". Using sutures to fix the hyoid bone anteriorly, the hypopharyngeal airway is kept open.

-Targeting base of tongue collapse with suture suspension. A new procedure ("Repose suture") utilizing a small screw in the inner surface of the mandible connected to a suture passed through the base of the tongue has been quite effective in controlling tongue collapse.

-Palatal collapse can be addressed with uvulopalatalpharyngoplasty (UPPP). Mild apnea with only palatal collapse may be addressed with laser palatal trimming. Snoring without significant apnea due to palatal collapse has recently been treated by "injection snoreplasty," injecting Sotradecol into the palate causing mild scarring and stiffening. Early studies show 90% control of snoring with minimal pain.

At the ENT center, we hope to help you evaluate and treat your patients with obstructive sleep apnea in a logical stepwise fashion, utilizing these recent advances and targeting multiple levels of obstruction. Our physicians would be happy to discuss or consult with you regarding any of your challenging patients.

The Epworth Sleepiness scale is a way to rank the severity of sleep disorder. Use the following scale to choose the most appropriate number for each situation:

- 0 = No chance of dozing
- 1 = Slight chance of dozing
- 2 = Moderate chance of dozing
- 3 = High chance of dozing

Score all the following situations:

Chance of Dozing Situation

- _____ Sitting and reading
- _____ Watching TV
- _____ Sitting inactive in a public place (e.g. a theater or a meeting)
- _____ As a passenger in a car for an hour without a break
- _____ Lying down to rest in the afternoon as circumstances permit
- _____ Sitting and talking to someone else
- _____ Sitting quietly after a lunch without alcohol
- _____ In a car, while stopped for a few minutes in traffic

Total score

- _____
- If you scored 1-6: Congratulations, you are getting enough sleep!
- If you scored 7-8: Your score is average to borderline.
- If you scored above 9: Seek the advice of a sleep specialist without delay.