# Heaving a Sigh of Relief with Sleep Apnea

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Disruptive snoring and obstructive sleep apnea (OSA) are common in our increasingly obese society. For individuals who have these problems, weight gain often worsens the sleep profile and weight loss often improves it. Periodic limb movement disorder (PLMD) may be associated with restless legs syndrome (RLS) and is often under appreciated as causing lack of sleep. Daytime sleepiness may result from all of these disorders, but the following may complicate the assessment of these patients:

- poor sleep hygiene,
- inadequate sleep time and
- alcohol ingestion.

## *Recognizing patients who may have OSA*

Most often, patients are referred because sleep partners have concerns regarding:

- loud snoring,
- pauses in breathing and
- gasping.

These are often worse in the supine position. Direct questioning may be necessary to elicit waking and daytime sleepiness as individuals often accommodate to this. Family members are often better at providing accurate historical information than the patient. Napping in the GP's office, falling asleep at red lights, or while driving usually indicate more severe OSA and are clear signals to initiate urgent assessment.

Office tools to help assess OSA include the Adjusted Neck Circumference[1] and the Epworth Sleepiness Score.

*The treatment for snoring and OSA can be very rewarding and may dramatically improve quality of life, not only for the patient but also for their sleep partner.*

### *The typical patient with OSA*

A typical patient with OSA is an obese middle-aged male with a history of snoring for many years. His weight has increased by a few pounds each year. His wife has moved to another bedroom because of worse snoring, gasping and pauses in his breathing at night. He has seen his GP a few times and has been given

antihypertensive and antidepressive medication. His wife has been after him to get his GP to check out his sleeping, but he finally mentions this after "a weekend away with the boys" when the group discourages him from returning home until he gets his sleep apnea fixed. Surprisingly, he does not mention daytime sleepiness without direct questioning.

## Assessing snoring and OSA

The office assessment of these patients includes a focused history eliciting any of the above points. It is important to ask about smoking, alcohol and medications, all of which may affect snoring and OSA. Cognitive changes and depressive symptoms may be prominent and BP may be elevated. In addition to the obese body habitus, a large tongue and crowded pharynx are common. The pharynx may be erythematous from heavy snoring. Craniofacial abnormalities, especially micrognathia and macroglossia, are less often seen, but can cause OSA in non-obese subjects. Large tonsils may be a problem for children but less so for adults.

A complete blood count and thyroid stimulating hormone test are useful as the hypoxemia, which accompanies severe OSA, may cause secondary polycythemia and hypothyroidism contributes to obesity and OSA.

Definitive testing has included overnight polysomnography in a sleep centre, but this is a limited resource and has resulted in long waiting lists. In the last few years, technology for home-based testing has become more popular and, when combined with a proper assessment, has had a similar outcome.[2,3] In our community-based clinic, we treat 95% of all referrals and send 5% to a university Sleep Centre because of more complex issues.

*Insomnia and daytime sleepiness may be caused by erratic sleep schedules, shift work, inadequate sleep time, caffeine, alcohol and medications.*

## Treating OSA

The treatment for snoring and OSA can be very rewarding and may dramatically improve quality of life, not only for the patient but also for their sleep partner.

Possible treatment options include:

- Lifestyle modifications, such as:
  - weight loss,
  - reducing alcohol consumption and
  - avoiding the supine position
- Nasal continuous positive airway pressure for moderate or severe OSA
- Custom fitted dental appliances for snoring, mild sleep apnea and positional (supine) sleep apnea

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## *Other sleep-related considerations*

Disorders other than snoring and OSA often come to light with a more detailed history. Patients with PLMD are restless sleepers, often disturbing their partners. Caffeine and alcohol may worsen PLMD, as well as drugs, such as selective serotonin reuptake inhibitors. There may also be a history of RLS. Narcolepsy is less common but may cause daytime sleep attacks, often starting during the teen years. Both conditions may be associated with significant sleepiness.

Difficult to distinguish from a sleep disorder, the following may result in daytime fatigue:

- chronic disease,
- depression and
- chronic fatigue states.

Insomnia and daytime sleepiness may be caused by:

- erratic sleep schedules,
- shift work,
- inadequate sleep time,
- caffeine,
- alcohol and
- medications.

These conditions may also contribute to pre-existing sleep disorders and may be cofactors in individuals with sleep disorders, such as OSA.

References

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