

Obstructive Sleep Apnea

Overview

- Occurs when soft tissues cause the airway to collapse, inhibiting breathing while sleeping.
- 20% prevalence in general population, defined as 5 apneas or hypopneas per hour (i.e. apnea/hypopnea index (AHI) > 5)
- Only 2-9% are symptomatic, i.e. have daytime sleepiness, hypertension, etc.
- More common in obese people, smokers, older people, African Americans, men, and those with craniofacial abnormalities
- Increases risk of death from heart failure and stroke, as well as all-cause mortality

Clinical Manifestations

- Daytime sleepiness, poor concentration
- Restless sleep, or snoring or gasping when sleeping
- Hypertension, pulmonary hypertension, heart failure

Diagnosed with polysomnography, which involves measuring the following:

- EEG
- Oxygen saturation
- Inspiratory effort using nasal prongs and a device that measures mouth breathing
- Other indicators not related to OSA but used for the diagnosis of other conditions (e.g. limb movement to diagnosis restless legs syndrome, EKG to diagnosis arrhythmias)

Treatment

CMS will pay for treatment when AHI > 15 , or AHI > 5 and symptomatic.

UpToDate recommends initiating treatment when the patient is symptomatic even if AHI < 5 , or if AHI > 5 and he or she performs critical work (e.g. pilot or bus driver) even in absence of symptoms.

- Everyone should be encouraged to lose weight, exercise, avoid sleeping on their back, and avoid CNS depressants like alcohol and certain medications (e.g. benzodiazepines)
- Severe OSA (AHI > 30 or severe clinical sequelae): positive airway pressure.
- Mild or moderate OSA (AHI < 30): positive airway pressure or oral appliance. →

References

UpToDate, Yale Curriculum

