OSA Facts

Definition of OSA and Prevalence

Obstructive sleep apnea (OSA) is a relatively common condition. In the United States, prevalence of OSA associated with daytime sleepiness is about 2% of adult women and 4% of adult men in the general population [(1)]. OSA is widespread with similar prevalence estimates of OSA from Europe, Australia and Asia. OSA is characterized by repeated episodes of upper airway collapse during sleep. Patients with OSA stop breathing frequently during their sleep (Apnea), often for a minute or longer. Fragmented sleep with recurrent arousals leads to daytime sleepiness and fatigue. Clinically, OSA is defined as >5 abnormal breathing disturbances (hypopneas or apneas) per hour of sleep combined with symptoms of daytime sleepiness. The American Academy of Sleep Medicine [(2)] (AASM) has classified OSA based on severity of Apnea-Hypopnea Index (AHI) as Mild (AHI: 5-15), Moderate (AHI: 15-30) and Severe (AHI: >30).

Risk factors

Population based studies have a provided an insight into the key risk factors associated with development of OSA. The key risk factors for OSA in the general population are excess body weight, male sex, and to lesser extents, cranial facial structures, smoking, alcohol consumption and aging. Knowledge of these factors is essential in appropriately directing clinical attention at those with highest risk.

Consequences of OSA

Millions of people each year are significantly impaired by the consequences of OSA. Daytime sleepiness, depression, weight gain, increase in industrial accidents and diminished quality of life are all commonly observed in people who suffer from OSA. Furthermore, OSA is associated with the development of systemic hypertension, cardiovascular diseases (heart failure, heart rhythm disorders), stroke, and diabetes.

Treatments

Treatments for OSA include weight loss, CPAP, oral appliances, and surgeries. CPAP is the current standard of treatment for OSA and is successful when used correctly and regularly. Usually, only half of patients regularly use CPAP, which creates an unmet clinical need for developing other new treatments.

1. *The occurrence of sleep-disordered breathing among middle-aged adults.* Young, T., et al. 1993, N Engl J Med, Vol. 328, pp. 1230-1235.

2. *Sleep-related breathing disorders in adults: recommendations for syndrome definition and measurement techniques in clinical research. The Report of an American Academy of Sleep Medicine Task Force.* 1999, Sleep, Vol. 22, pp. 667-689.

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