

Obstructive Sleep Apnea

Obstructive Sleep Apnea (OSA) is a life threatening and life altering condition that occurs when a person repeatedly stops breathing during sleep because his or her airway collapses and prevents air from getting into the lungs. Sleep is repeatedly disrupted by apneas, depriving OSA sufferers from the deepest, most restful stages of sleep. Apneas may occur more than 20 times every hour. A person with OSA never feels rested because they never have normal sleep. The lack of sleep affects daytime alertness and one's ability to function well throughout the day. The low oxygen levels associated with OSA, and the effort required to breathe during the night, put a strain on the cardiovascular system. Ultimately, OSA takes its toll on the individual's quality of life.

Normal Breathing



Airway is open
Air flows freely to lungs
Brain rests

Definition of Obstructive Sleep Apnea (OSA)

- Obstructive Sleep Apnea (OSA) is a potentially life-altering and life-threatening breathing disorder that occurs during sleep
- The upper airway repeatedly collapses, causing cessation of breathing (apnea) or inadequate breathing (hypopnea) and sleep fragmentation.
- Sleep fragmentation results in chronic daytime sleepiness

Obstructive Sleep Apnea



Airway collapses
Airflow is blocked
Brain is kept on alert,
unable to effectively rest

Consequences if OSA is left untreated

- Hypertension
- Cardiac Arrhythmias
- Myocardial Ischemia
- Myocardial Infarction
- Stroke
- Motor Vehicle and work-related accidents due to sleepiness
- Decreased quality of life
- OSA patients, prior to diagnosis and treatment, consume 2.5 times more health care resources than patients without OSA.

Prevalence

- 50 – 60 % of patients with impaired cardiac function suffer from sleep related breathing disorders
- Nearly 30 % of patients with severe heart failure suffer from daytime sleepiness
- 4 % of men and 2 % of women ages 30 – 60 meet minimal diagnostic criteria for OSA with excessive daytime sleepiness (an estimated 18 million people). An even greater number of people have sub clinical apnea/hypopnea during sleep.
- The majority of OSA sufferers remain undiagnosed and untreated.

Identification of OSA

Signs and Symptoms

- Snoring, interrupted by pauses in breathing (apnea)
- Excessive daytime sleepiness
- Gasping or choking during sleep
- Restless sleep
- Intellectual deterioration
- Poor judgment / concentration
- Memory loss
- Irritability
- Hypertension
- Nocturnal angina
- Depression
- Obesity
- Large neck girth (> 17" in men, > 16" in women)
- Oropharyngeal Crowding
- Morning headaches
- Sexual dysfunction
- Nocturia
- Lower extremity edema