

Dental Sleep Medicine

Dental Sleep Medicine is an area of practice that focuses on the management of sleep-related breathing disorders including snoring and obstructive sleep apnea through the use of oral appliance therapy and upper airway surgery.

Obstructive Sleep Apnea

Sleep apnea is a potentially life-threatening medical disorder that causes your body to stop breathing during sleep. The muscles in your throat relax and the tongue may fall back and block the airway as you sleep, reducing the amount of oxygen delivered to all of your organs including your heart and brain. People with sleep apnea may snore loudly and stop breathing for short periods of time. The breathing pauses from sleep cause your body to briefly wake while you remain unaware. This can happen hundreds of times per night, and you may wake up feeling unrefreshed.

In addition to snoring and excessive daytime sleepiness, sleep apnea can cause memory loss, morning headaches, irritability, depression, decreased sex drive and impaired concentration. When left untreated, sleep apnea can lead to hypertension, stroke, heart attack and sudden death while asleep.

Sleep apnea patients are often older, obese and have thick necks, but men and women of any age or body type can have sleep apnea. The sleep disorder progressively worsens with age and weight gain.

The vast majority of sleep related breathing cases go undiagnosed and untreated. An Institute of Medicine report found that an estimated 50-70 million Americans suffer from chronic sleep disorders, including sleep apnea. Excessive daytime sleepiness alone costs the economy \$150 billion in lost productivity and workplace accidents another \$48 billion in medical expenses related to auto accidents involving drowsy driving. Nearly 1 in 5 car accidents causing serious injury are associated with excessive daytime sleepiness.

Dentists together with sleep physicians are challenged to respond to the health risks and economic impact of untreated sleep apnea and excessive daytime sleepiness.

Dental Sleep Specialists and Oral Appliance Therapy

Dentists have pioneered the use of oral appliance therapy for the treatment of sleep apnea and sleep related breathing disorders. An oral appliance is a device worn in the mouth only during sleep. The device fits like a sports mouth guard or orthodontic retainer and prevents the airway from collapsing by either holding the tongue or supporting the jaw in a forward position. With an oral appliance, dentists can minimize or eliminate the symptoms of sleep apnea in mild to moderate cases.

Dentists with training in oral appliance therapy work closely with sleep physicians in the diagnosis, treatment and ongoing care for sleep related breathing disorders. The American Academy of Dental Sleep Medicine and the American Academy of Sleep Medicine recommend that a physician must diagnose sleep disorders including sleep apnea. Sleep physicians at AASM accredited sleep centers use an overnight sleep study to detect and diagnose sleep apnea.

Once a patient is diagnosed with sleep apnea or a sleep related breathing disorder, dentists may provide treatment. Dentists assist patients in the selection and fitting of an oral appliance and provide long-term follow-up care.

Upper Airway Surgery

A dental sleep specialist may recommend upper airway surgery when other treatment options are unsuccessful in eliminating the symptoms of sleep apnea or are not tolerated by patients. Depending on the location and nature of the airway obstruction, the procedure may be minimally invasive or more complex. It may be necessary to remove the

tonsils or other parts of the soft palate or throat.