

Approximately 40 million Americans suffer from chronic sleep disorder. And 20 to 30 million experience occasional sleep disturbances.

As dentist's we routinely exam the oral and oropharyngeal cavity. Airway obstruction, respiratory dysfunction and associated airway collapse during sleep can lead to increased airway resistance along with associated snoring and sleep apnea. Therefore dentist's are well positioned to aid in the management of these conditions. With the use of intra-oral appliances that reposition the mandible, dentistry can play a major role in reducing or eliminating snoring as well as reduce or control the adverse consequences of sleep related breathing disorders.

There are a number problems that relate to sleep disorders. They include but are not limited to heart disease , high blood pressure obesity and diabetes. Dentally they include Bruxism, malocclusion, and dental crowding orafacial pain, headaches and coated tongue from increased gastric esophaegeal reflux.

#### **Profile of person with SRBD (Sleep Related Breathing Disorder)**

Age: prevalence progressively increases with age.

Obesity: likelihood increases with increasing weight.

Gender: 5 to 10 times more common in males.

- ❖ large tonsils or adenoids
- ❖ disproportionate upper airway anatomy
- ❖ sedative- hypnotic drugs in late P.M.

Dentally we can identify certain physical characteristics, a high palate which can be genetic but can also result from thumb sucking, narrow upper arch, moderate to severe overbite. Size of tongue as it relates to arch. amount of soft tissue in oral cavity. Size of uvula. Treatments available for sleep related breathing disorders include a CPAP (continous position airway pressure) the CPAP device involves wearing a mask like device while you sleep. Which provides pressurized air to prevent the airway from collapsing. Many patients find this device uncomfortable and difficult to use. Another commonly used treatment for mild to moderate sleep apnea are oral appliances. They are used to reposition the mandible so that the airway is improved and the potential for airway collapse during sleep is

significantly reduced. Surgery is another option for some patients. It will increase the size of your airway. By removing excess tissue at the back of the throat or inside the nose.

One other surgical intervention is called the “Pillar Procedure” where the surgeon places three tiny woven inserts in the soft palate to provide structural support this helps reduce the vibration that causes snoring and the ability of the soft palate to obstruct the airway. If you believe you have sleep problems you should see your physician and or dentist, So you can be properly diagnosed. Some self help include are not limited to maintaining regular sleep hours. Pay attention to your weight, obese individuals are at higher risk, elevating the position of your head while sleeping by 45 degrees can make breathing easier. Avoid alcohol, tobacco and sleeping pills for at least four hours before bedtime. Alcohol and tranquilizers cause the soft tissues of the back of the throat to sag. Smoking causes throat tissues to swell. Sleep on your side, laying on your back lets your tongue and nearby soft tissues slip back into the airway.

**symptoms of sleep problems are but not limited to.**

- ❖ Snoring (intermitted with pauses)
- ❖ Excessive Daytime sleepiness.
- ❖ Awakenings, gasping or choking.
- ❖ Fragmented, Non- refreshing, light sleep.
- ❖ Poor memory, Clouded Intellect
- ❖ Irritability, Personality change
- ❖ Decreased sex drive, Impotence
- ❖ Morning Headaches
- ❖ Dry Mouth
- ❖ Swollen legs

**If left untreated sleep / snoring problems can have the following effect**

- ❖ Age more rapidly
- ❖ Be more susceptible to colds, flu's and other infections.
- ❖ Display or increase risk of accidents due to sleepiness and poor coordination.
- ❖ Experience more emotional problems including anxiety and depression.
- ❖ Feel irritable and experience mood swings.
- ❖ Have reduced ability to deal with stress.
- ❖ Increase your risk of obesity, heart disease, diabetes and strokes.
- ❖ Show poor judgement, poor concentration and or inability to make decisions.

Surgery is an option for some patients with obstructive sleep apnea. They include nasal reconstruction, Uvulopalatopharyngoplasty/ Uvulopalatalflap, genioglossus advancement, Hyoid advancement, Maxillomandibular advancement, Maxillomandibular expansion and Temperature controlled radio frequency tongue base reduction. The most widely performed procedure is Uvulopalatopharyngoplasty (UPPP). Potential surgical risks include pain, dysphasia, bleeding and altered palatal function. These risk have caused concern for both patients and doctors. So more often than not patients, who are CPAP intolerant and or do not use oral appliances go untreated. Studies demonstrate that the airway is significantly smaller in patients with obstruction occurs at multiple levels of the airway. Therefore the surgical management or obstructive sleep apnea must address the multiple sites of obstruction.