

## Sleep Apnea Anyone?

Sleep Apnea is no laughing matter. It is the root cause of many medical conditions which potentially could lead to serious disabilities and death. This disease strikes adults and children alike. Approximately 90 million people in North America suffer from sleep disorders including insomnia, snoring and sleep apnea.

Obstructive Sleep Apnea (OSA) is defined by recurring interruption of breathing during sleep due to obstruction usually of the upper airway especially by weak, redundant or malformed pharyngeal tissues (such as tonsils, adenoid tissues) . Symptoms may include:

- \* Loud Snoring
- \* Excessive daytime sleepiness
- \* Depression
- \* Fatigue
- \* Impaired concentration
- \* Morning Headaches

Often times, OSA is associated with high blood pressure and diabetes. Study had shown that 90% of stroke victims also suffer from OSA. People with OSA are 4 times more likely to have a heart attack.

### **How to get diagnosed.**

Sleep Apnea is a medical condition which should be properly diagnosed by medical physician, usually sleep medicine specialist. The diagnosing process begins with initial screening questionnaires for the person and bed partner. Such questionnaires can be given by primary care physician (PCP) and/or dentist. PCP and dentist can then perform the primary evaluation using the answers to the questionnaires and detailed medical history to identify the co-morbidity factors. Should there be enough evidence to raise the suspicion of sleep apnea, the person should be then referred to the sleep specialist.

The most definitive test for sleep disorder is called polysomnogram (PSG). It is commonly known as overnight sleep test. It is the gold standard in sleep testing. It would require the person to spend a night in a sleep laboratory. The test measures multiple aspects of a person's sleep. Things such as breathing pattern, eye movements, body turning, oxygen level, and brain waves are recorded. Data collected is then used in several different formulas in calculating the degree or risk of apnea. The two most common indexes are AHI and RDI

Another test a sleep doctor may use is home sleep test. It is similar to PSG, but it records fewer types of data. The advantage is that the person is sleeping more comfortably in his

own bed then in a laboratory which makes the data more realistic. This type of test is becoming more popular as screening and post treatment follow up tool.

### **Management of OSA**

Rarely, OSA can be totally cured. Besides weight and living style management, there are several options available to improve the condition. First step is to make sure airway is cleared of excessive soft tissues such tonsils and adenoids. Constant positive air pressure, or C-PAP has been the main choice of treatment method. It works by blowing pressured air to keep the airway open. It is a proven method; however, there is compliance issue. The most common complaints are the interfering face mask and unable to breath normally due to the high air pressure. Compliance is an important factor. If a patient doesn't use the CPAP, OSA will not improve.

### **Oral Appliance Therapy**

In 2006, American Academy of Sleep Medicine recommended that dentists should be involved in managing OSA by fitting patients with oral appliances. The concept of oral appliance for OSA is to enlarge the airway by physically moving the lower jaw forward. This form of treatment is recommended for patients with mild to moderate OSA (AHI from 0 to 50 ). For those patients with severe OSA, it is possible to combine CPAP with oral appliance. The benefit is reduction in the level of CPAP pressure required which ultimately increases patient compliance in using the CPAP machine. The value of having a dentist to oversee the oral appliance fitting is our ability to recognize and manage TMJ problems when may occur during the process.

### **Dentist's Role in OSA management**

As part of the medical team, dentists are uniquely qualified to contribute in OSA management. Sleep Apnea is a serious medical condition involving multiple systems in the body. It requires a team of specialists to manage the issue. Because of our knowledge and personal relationship with our patients, it is easier for us to identify the people who are likely suffering from sleep apnea. Our specialized training in TMJ and oral appliance therapy in general makes us the authority in oral appliance therapy for OSA.

The separation between medical and dental field is diminishing. More and more evidence are surfacing showing us the cause and effect relationship. Examples are: periodontal disease associating with heart disease, TMJ problem with headaches. It is increasingly clear that dentists must work closely with physicians in order raise the standard of care for our patient to the next level.

**Think you may have Sleep Apnea? Come talk to us. We offer take home sleep test.**