

When oral evaluation reveals an airway restriction due to chronologically enlarged tonsils, an enlarged tongue or soft palate abnormality, a dental appliance can be a successful treatment of snoring and/ or obstructive sleep apnea. To increase breathing potential, sometimes orthodontics can be performed to make additional room for the tongue and widen the arch. Research has shown that appliances are very effective when choosing a treatment modality especially as an alternative treatment.

An appliance worn during sleep prevents the airway from collapsing by creating extra space. While many appliances are available to treat snoring and obstructive sleep apnea (see sample of one above), only a specially trained dentist can properly select and fit the type of appliance that is needed.

More dentists who treat TMJ – temporamandibular ioint disorders - are an excellent choice because they are very much aware of the jaw position when making the device. This is an important consideration. In fact, TMJ appliances can often be adapted to work for sleep apnea. Appliances are light and easy to wear. In only a few weeks, most patients are comfortable.

2. Continuous Positive Airway Pressure (CPAP) - consists of an air compressor and mask which delivers pressurized air through the nose when a person is sleeping. This opens up the airway from the inside - as if the air were an internal splint. The biggest hurdle for using this method is compliance. Many patients feel claustrophobic with it and others find

wearing the mask to be offensive. The strap of the mask worn around the head may even cause headaches.

3. Surgery – the most invasive method of treatment and is performed only in cases of severe obstruction apnea when excessive tissue reduces the airway space. This surgery is known as UPPP surgery (Uvulopalatopharyngoplasty) and according to most clinical investigations, is only 50% effective except in cases where abnormalities are present: enlarged tonsils, nasal polyps, a deviated septum or jaw malformations. These defects are helped and corrected by surgery procedures.

With so many advances in the dental field, dentists are able to conservatively and successfully treat those suffering with snoring or sleep apnea. If poor sleep interferes with your daily activities like reading, remaining alert during meetings, watching television or when driving or operating equipment, discuss it with your dentist. S/he will help you determine what course of treatment is best for you.

Your health is your most priceless possession. It is worth the investment.





#### Dr. Marvin F. Dorotheo

- TMJ-Orthopedics
- **Oral Surgery**
- Orthodontics
- (Snoring and Sleep Apnea Management)

• Dental Sleep Medicine

- Implantology Cosmetic Dentistry
- Orthodontic Diagnostics Aides and X-Ray Services
- Snoring, **Sleep Apnea** and **Dental Health**



Snorers often receive an elbow jab in the ribs from someone else as a reminder to roll-over and sleep. While snoring disrupts the sleep of those close to us, it also interferes with our own sleep and over-all health. In the past decade, obstructive sleep apnea syndrome has become widely recognized as a serious problem with life threatening complications.

#### **About Snoring**

Snoring is a breathing noise that occurs while someone is sleeping. The actual snoring sound is produced from the vibration of the soft palate and sides of the throat when air rushes against them. The sound of snoring occurs when the airway collapses and the muscles fail to maintain their normal function.

In recent years, snoring has been acknowledged as a warning sign that normal breathing is not taking place during sleep. For the majority of adults, snoring does not involve a serious medical disorder. However, adults who snore need to know that it may be the first sign of obstructive sleep apnea (OSA).

# **Understanding Sleep Apnea**

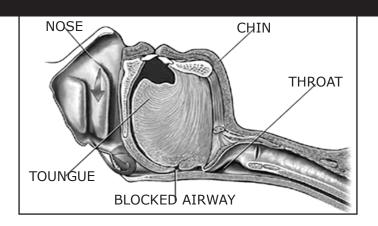
Apnea is a Greek word that means "want of breath." A person is considered to be a sleep apnea sufferer when they stop breathing for at least 10 seconds up to thirty times or more a night. A few of the medical and dental conditions that can lead to snoring are:

- overweight
- allergies
- a small retruded jaw
- alcohol before retiring
- sedatives
- airway obstruction

Snoring maybe indicative of sleep apnea, a cessation of breathing during sleep, which can put a great strain on the cardiovascular system, respiratory system and kidneys. This is why sleep apnea, left untreated, increases risk of heart attack and stroke.

Besides snoring, other common symptoms of sleep apnea include:

- morning headaches
- dry mouth and throat
- excessive daytime sleepiness



- sudden short-of-breath awakenings, choking or gasping
- lost interest in sex

A lack of sleep effects our walking lives and those around us. Even the table of "Sleeping Beauty" could have ended differently if the Prince had detected snoring and not awakened her without his magic kiss.

# **3** Basic Classification of Sleep Apnea

- 1. **Central** when airflow and respiratory movements temporarily cease although the airway may remain open.
- 2. **Obstructive** when airflow ceases due to an upper airway obstruction in the presence of a respiratory effort. (This is the most common kind.)
- **3. Mixed** a combination of central and obstructive apnea which usually begins with a central episode followed by an obstructive one.

# **Diagnosis and Treatment**

Before any therapy is performed to treat sleep apnea, the use of sleeping aids and alcohol is restricted and a weight loss program is suggested for those who are overweight. When sleep apnea is suspected, an experienced, specially trained dentist usually refers patients to a physician or sleep specialist for a complete medical assessment.

Most likely, the physician will suggest a test called a polysomnogram. This technologically advanced sleep study monitors breathing patterns, sleep stages and cardiac rhythm along with airflow and length of non-breathing episodes. Once diagnosed, sleep apnea can be treated several different ways:

1. <u>Oral Appliance Approach</u> – a conservative treatment is to have a dental appliance made to wear during sleep which gently moves the lower jaw forward causing a positive change in tongue position. Advantages of an appliance – also known as an orthodontic device or mouthguard – over other therapies include:

Inexpensive cost	Easily accepted by patients
Non-invasive	Reversible

As a special member of the sleep apnea team of health professionals, a trained dentist will perform an intra-oral exam to determine where the blockage is and what is causing the obstruction. Along with a complete medical and dental history, which may include:

- intra-oral habit assessment
- evaluating periodontal health
- x-rays and diagnostic model
- TMJ and occlusal exam
- checking gag reflex
- tonsil exam
- orthopedic exam