

## Snoring and Sleep Apnea

**By Dr. Jack Fletcher, Family Dentist**

Snoring is no longer considered a healthy, normal condition. Snoring indicates an airway obstruction and limits the volume of air taken in during sleep. Sleep apnea is a condition where breathing stops for more than ten seconds at a time during sleep. The cessation of breathing for less than ten seconds is called sleep hypopnea.

Snoring and sleep apnea can occur at any age, in almost any body shape, or in either sex. Generally, the sleep apnea condition occurs in men over 50 years old with a size 17 inch or larger neck, but I have seen it in 4 year olds and small women as well.

Studies have shown snoring will cost anybody sleeping near the snorer over two hours of sleep a night. Even worse for the snorer though, there is less oxygen uptake by the blood during an apnea event and the pressure of oxygen in the blood (pO<sub>2</sub>) will drop from a normal of 96 to 80 or lower.

Oxygen is needed to maintain life and having less available to cells will decrease the body's ability to heal. Furthermore, people who suffer from snoring or sleep apnea will not spend as much time in REM sleep as normal people do. The lack of rapid eye movement (REM) or dream sleep further diminishes the healing/regenerative time the body needs, will increase blood pressure, and may lead to depression and sleep deprivation.

Many people who snore will also grind their front teeth because of the increased muscle activity at lesser levels of sleep.

I use an Epworth Sleepiness scale to screen for sleep apnea. This scale combined with red, inflamed tissues at the back of the mouth, and a tongue that has tooth shaped indentations at its side are a good indicator of an apnea problem.

There are three types of sleep apnea: central; mixed; and obstructive (OSA). It is very important that the type of apnea be diagnosed. This is done best in an overnight sleep study – locally done at U.B.C., Surrey and Richmond hospitals. You need a physician's referral for an overnight study as these are done by specialists in sleep medicine.

The treatment of central (brain) and mixed (brain and obstructive), and severe obstructive apneas are with machines such as CPAP (continuous positive airway pressure), bi PAP (two different pressures or a VPAP (variable pressures). These machines work to put air in lungs by forcing the obstruction (usually the tongue) out of the way. The treatment of snoring and mild or moderate sleep apnea can also include the breathing machines but are increasingly being treated with dental devices that re-position the lower jaw in a more forward position that pulls the tongue with it and relieves the obstructive behavior of the tongue.

These mandibular repositioning appliances (MRA) are considered by most patients to be more comfortable than the CPAP type machines and in fact they have been considered the first line of treatment for mild and moderate OSA in the USA for almost three years. The MRAs are smaller, easier to travel or camp with, more comfortable, and less annoying to someone sleeping nearby.

The most researched MRA is the Clearway device invented by Dr. Alan Lowe at UBC. There are other devices that work in a similar manner and many are a bit smaller than the Clearway. The website [www.clearway.com](http://www.clearway.com) has a lot of research articles if you need more information. I have taken Dr. Lowe's Advanced Sleep Apnea course and I am well versed in this problem and its treatment.

A deep, peaceful sleep on an ongoing basis will improve the immune system and general sense of well-being. It is well worth the investment of your time to address your issue of sleep apnea.