



Sleep-disordered Breathing

Sleep-disordered breathing includes snoring, upper airway resistance syndrome, and obstructive sleep apnea. A sleep study is needed to determine the severity of sleep-disordered breathing. Apnea is defined as a cessation of airflow for at least 10 seconds. More than 5 episodes per hour associated with chronic daytime fatigue is considered abnormal. More than 15-20 episodes per hour is considered more than mild obstructive sleep apnea. This is a medical condition with long term adverse health consequences if not effectively treated. Upper airway resistance syndrome is snoring with frequent sleep arousals, chronic daytime fatigue, but without true apnea. If symptomatic sleep-disordered breathing is an issue, then a therapeutic CPAP (continuous positive airway pressure) study is recommended. It may be done the same evening as the diagnostic sleep study. Various nasal or facial masks are used to deliver the CPAP from a bedside device. If patients tolerate the CPAP, then it should be the long term method of treatment. You will have more energy and it will improve overall health. Effective compliance is considered to be at least 4 hours of usage five nights a week. The sleep lab will have several methods to improve comfort and compliance.

For many people, excess weight/obesity contributes to the sleep-disordered breathing. A weight loss program should be started. Alcohol and sleeping pills should be avoided as they may increase sleep-disordered breathing. There are other treatment options available for those patients with just snoring. There may be other options for patients with upper airway resistance syndrome or obstructive sleep apnea that despite multiple adjustments are unable to tolerate CPAP.

Snoring treatment is usually not covered by insurance. Other treatment options for the more significant sleep-disordered breathing problems may be covered. There are a few interventions to try first. Some people improve with positional maneuvers. Obstruction is usually more significant while sleeping on your back. Sleeping on your side or front may help. Some will sew a pocket with a tennis ball inside onto the back of a sleep shirt. This may help avoid rolling over onto your back. Sometimes, improving nighttime nasal congestion may help. Breathe rite nasal strips or a prescription topical nasal steroid spray may help. Provent is a nasal device that may help. A dental appliance is an option. Your dentist may provide this service. It may be expensive. The appliance is custom fit to upper and lower dentition. These appliances help to pull the jaw forward and thus increase the airway opening during sleep. Treatment success and compliance may be around 50%.

If none of these options work, surgical procedures may be considered. There are several procedures available to improve snoring. Palatal flutter or soft palate snoring is the most bothersome to a sleeping partner. Treatment is directed at altering the soft palate. Attempts are made to shorten and or stiffen the palate. There are various methods and costs which may be discussed. Improvements are usually not permanent and future procedures may be appropriate.

For those with sleep-disordered breathing other than palatal flutter snoring, a comprehensive physical exam will help determine the likely locations of airway obstruction. Contribution to airway obstruction may occur at the soft palate, tonsils, tongue base, lower throat, or nose. It may also be related to a large body size and neck circumference. If obstruction occurs at multiple levels, surgery may need to be done in stages. Surgical success is highly variable. Additionally, surgery on patients with severe sleep apnea would be considered risky. Keep in mind, some people just do not have favorable anatomy and cannot expect any significant improvement with surgery. These patients should make every attempt to tolerate CPAP.

Nasal obstruction may be improved with surgery. Improved nasal breathing may allow a better ability to tolerate CPAP treatment. Improved nasal breathing may help snoring but usually will not improve other sleep-disordered breathing problems.

In appropriate patients, surgical procedures to improve symptomatic sleep-disordered breathing involve the tongue and throat. Removal of large tonsils and areas of the soft palate may be helpful. It is possible to predict which patients will likely benefit from this type of surgery. Other surgeries are directed toward tongue reduction, tongue advancement, and improving the patency of the lower throat during sleep. Tongue base reduction with coblation is an option that is not usually associated with a prolonged recovery. However, success rates are variable. The other procedures may be associated with a long and difficult recovery. Surgical success is in no way 100%. These procedures even if they do improve sleep apnea may create new problems. This possibility must be understood before pursuing surgery. Evaluations for these more involved procedures are better served at medical centers specializing in the surgical treatment of severe obstructive sleep apnea.

Bottom line, it is important to understand that treatment for sleep-disordered breathing is complex.