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## OBSTRUCTIVE SLEEP APNEA (OSA)

Sleep apnea means “**to stop breathing in sleep**”. It is a common disorder that is associated with heart disease, diabetes and stroke. It is usually associated with snoring and the bed partner often complains that the patient is choking, gasping or snorting in sleep. The patient **may not aware of this as sometimes sleep apnea can be silent**. With each pause in breathing there **may be a dip** in blood oxygen level and an **increased** heart rate that can cause a disruption in your quality of sleep. Most patients with sleep apnea complain of **non-restorative sleep, daytime fatigue** or **excessive daytime** sleepiness.

### Causes of Sleep Apnea

- **Sleep apnea increases with age**; the prevalence in men ages 20-44 is 3.2% versus 18.1% in men ages 61-100. This is believed to be caused by increased fatty deposits in the parapharyngeal area (areas in the head and neck), lengthening of the soft palate, and changes in body structures surrounding the pharynx (part of the throat).
- Post-menopausal women not on hormone replacement therapy have a higher risk of developing sleep apnea.
- Overweight or Obesity
- A big neck with large tonsils, adenoids and tongue or a receded jaw line or overbite and a small oral opening
- Smoking and alcohol can make sleep apnea worse

### Signs and Symptoms of Sleep Apnea

The most common signs of sleep apnea are loud snoring associated with:

- Choking, gasping or snorting during sleep, leg-kicking in sleep
- Non-restorative sleep, daytime fatigue or excessive daytime sleepiness
- Morning headaches/**morning heartburn**
- Changes in memory, concentration, personality and mood, impotence (sexual dysfunction)

### Risks and Consequences of Untreated Sleep Apnea

- Untreated OSA is a risk factor for high blood pressure, heart attack, diabetes, stroke, headaches, memory loss, depression, and work-related/ car accidents. As well, heart failure is linked with OSA.

### Treatment for Sleep Apnea

Treatment aims to help keep your airway open during sleep so that you can **continually** breathe. The goal of treatment is to improve sleep quality **by reducing respiratory disturbances** and to reduce the risk of associated medical problems.

### Treatment

- **Lifestyle changes**
  - Avoid alcohol and smoking as these can negatively impact symptoms of sleep apnea
  - Weight loss can reduce sleep apnea and improve symptoms
  - Sleeping on your side can minimize your sleep apnea
- **Positive airway pressure**
  - Positive airway pressure (PAP) is the most common treatment for sleep apnea and it is delivered by a small air compressor and mask. You wear a mask over your face during sleep which blows air into your throat at a pressure level that keeps your throat open during sleep.
- **Dental appliance**
  - A mouthpiece (oral appliance) may be helpful in some people with snoring or **mild to moderate sleep** apnea. A custom-made mouthpiece will be made by a sleep dentist. The mouthpiece will adjust your lower jaw and your tongue to help keep the airway in your throat open during sleep.
- **Surgery**
  - Some people with **snoring or mild sleep apnea** may benefit from surgery. Your sleep specialist will refer you to a special surgeon to discuss this surgery if it is appropriate for you.