## **Treatment**

For all patients who are obese, diet and exercise can reduce the amount of pressure on the airway, making it easier to breathe while sleeping.

For patients with moderate hypopnea, continuous positive airway pressure (CPAP) treatment is available. It is the most effective treatment for moderate hypopnea. During this treatment, patients wear a mask over his nose and mouth, and CPAP splints the upper airway, preventing the soft tissues from blocking the airway. This mechanism eliminates hypopneas and allows normal oxygen level to be maintained throughout the night.

In addition to CPAP, oral appliances can be used to move the tongue or the mandible forward to enlarge the posterior airspace.



For severe cases of hypopnea, the upper airway can be surgically corrected. However, surgery should be reserved as the last resort for treatment. Surgery usually involves repositioning the tongue or the soft tissues that obstruct the airway.

Most serious health consequences of hypopnea is preventable with CPAP and better sleeping habits.

### Resources

American Academy of Sleep Medicine
One Westbrook Corporate Center, Ste. 920,
Westchester, IL 60154
Telephone (708) 492-0930
www.aasmnet.org/

American Sleep Apnea Association 6856 Eastern Avenue, NW, Suite 203, Washington, DC 20012 Phone: (202) 293-3650 www.sleepapnea.org/index.html

A.W.A.K.E. (Alert, Well, And Keeping Energetic)
Local support groups throughout the
United States
www.sleepscene.com/awake.html

CPAP Talk Forum www.cpaptalk.com

National Sleep Foundation www.sleepfoundation.org/





## **General Information**

Obstructive sleep apnea-hypopnea (OSAH) is a sleep disorder in which the upper airway recurrently collapses, making it extremely difficult to breathe while sleeping. This disruption in sleep causes a drop in blood oxygen level, which disrupts the stages of sleep. Hence, people with hypopnea do not feel rested after a full night of sleep. Hypopnea differs from obstructive sleep apnea (the complete cessation in airflow) in that there is still airflow, though the amount of air intake is greatly reduced. If the cessation in breathing lasts less than 10 seconds, then it is considered hypopnea, and if it last longer than 10 second, then the sleep disorder is considered obstructive sleep apnea.





Normal

Obstructed

# **Symptoms**

**Nocturnal Symptoms** 

- Loud, habitual snoring
- •Gasping, choking sensations that arouse sleep
- •Restless sleep (frequent arousals and tossing and turning during the night)
- Apneas (cessation in breathing) that interrupt snoring and end with a snort

## **Daytime Symptoms**

- · Excessive sleepiness
- Morning headaches
- · Dry, sore throat
- Fatigue
- · Mood changes
- Problems with memory, concentration, and cognitive functions

# **Risk Factors for Hypopnea**

- Obesity
- Male sex
- Aging
- Neuromuscular diseases
- · Alcohol abuse
- · Use of sedatives
- · Craniofacial abnormalities
- Family history of sleep apnea-related disorders

# **High-Risk Groups**

#### Sex

2% of women and 4% of men have hypopnea.

Male-to-female ratio for hypopnea is 2-3:1.

#### Race

Prevalence of hypopnea is greater and more severe in African Americans.

#### Aae

Prevalence of hypopnea increases with age.

65% of people older than 65 years have hypopnea.

## **Treatment**

First, all patients with signs or symptoms of obstructive sleep apnea-hypopnea should visit a sleep disorders center for an evaluation by a sleep physician and a polysomnography test.

The treatment of hypopnea depends on the severity of the sleep disorder. It can range from changes in sleeping habits to surgery in severe cases.

If it is a mild hypopnea, reasonable weight loss, avoidance of alcohol 4-6 hours before bedtime, and sleeping on one's side rather than on back can help alleviate the symptoms of hypopnea.