

## **Sleep Disorders**

One of the most serious sleep disorders is sleep apnea. An individual with this condition literally stops breathing during sleep. Snoring, gasping or choking during sleep may occur. This may happen hundreds of times during the night, causing a person to awaken slightly to resume breathing. Such fragmented sleep is not restful, but dangerous in that it is related to high blood pressure, cardiovascular disease, weight gain and other health problems.

Obstructive Apnea is caused by temporary blockages in the throat and nose which prevent air from passing into the lungs. These blockages are caused by relaxed throat muscles, the tongue, excessive fatty tissues, enlarged tonsils or enlarged adenoids.

Central Sleep Apnea usually affects adults over age 60, and sufferers often complain of insomnia. This is a rare form of apnea where the brain fails to send messages to the respiratory systems.

#### Signs of Sleep Disorders:

- Excessive or loud snoring, choking or gasping during sleep
- Difficulty falling asleep or staying asleep
- Daytime sleepiness, fatique, irritability, or difficulty concentrating
- An achy, creeping or burning feeling in the legs when reclined
- Morning headaches
- Use of caffeine or other medications to stay awake
- Hypertension (high blood pressure)

#### Some factors that contribute to obstructive sleep apnea include:

• Large tongue

Narrow airway

Nasal obstruction

• Recent weight gain

- Certain shapes of the palate and jaw
- Large tonsils and
- adenoids in children
- Large neck or collar size



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During my training I was intrigued by COPD, Asthma and Lung Cancer due to the complexity of the disease and the inherent scope for improvement in its management. I was particularly drawn towards the dynamics of the management of patients with lung problems including COPD (Chronic Obstructive Pulmonary Disease), Asthma and Obstructive Sleep Apnea.

#### **Experience and Education**

Veterans Affairs, Western New York, Buffalo, New York Critical Care Medicine

Long Island College Hospital, State University of New York Downstate Critical Care Medicine

Mercy Medical Center, Mason City, Iowa Director – Respiratory Therapy Department Director – Pulmonary Rehabilitation Medicine Pulmonary / Critical Care Medicine

Sleep Medicine Fellowship University at Buffalo, State University of New York

Critical Care Medicine Fellowship Albert Einstein College of Medicine Program

Pulmonary Medicine Fellowship Yale University Program Bridgeport Hospital Bridgeport, Connecticut

Internal Medicine Residency St Mary's Health Centre St Louis, Missouri

Masters of Public Health University of North Carolina at Chapel Hill

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# Chest & Sleep Medicine



# Sleep Disorder Treatment

The most common treatment for sleep apnea is continuous positive airway pressure (often referred to as CPAP).

This consists of wearing a mask that delivers an air pressure to keep the airway open during sleep. There are several different styles of masks.

You will be fitted with a mask that is comfortable for you, and during the titration sleep study the technologist will adjust the pressure to reduce or eliminate all of the apneas. This is the most effective treatment for sleep apnea.

#### Other treatments for sleep apnea include:

**Oral appliances** – These are devices worn in the mouth that pull the jaw forward to help keep the airway open.

**Provent therapy** – Uses your own breath to create EPAP which helps keep your airway open explatory positive airway pressure

**Behavioral therapy** – Weight loss may reduce or eliminate sleep apnea. Reducing the use of alcohol or sedatives may also reduce or eliminate sleep apnea.

Apnea occurs more frequently while sleeping on your back; therefore, sleeping on your side may reduce or eliminate sleep apnea.





Chronic obstructive pulmonary disease refers to two lung diseases, chronic bronchitis and emphysema. The term COPD is used because both diseases cause chronic cough and shortness of breath, making it harder

COPD does not always present itself the same in all patients and treatment options may differ from patient to patient. Most medicine doctors, cardiologists, neurologists and surgeons choose to manage COPD patients with a pulmonologist. Dr. Shetty and your healthcare team will work with you to set up the best plan for you, based upon your symptoms and your needs.

#### The symptoms include:

• Increased breathlessness

for people to breathe over time.

- Frequent coughing (with and without sputum)
- Wheezing
- Tightness in the chest

#### By taking the right medicine at the right time, you can:

- Breathe better
- Do more of the things you want to do
- Have fewer flare-ups

## **Pulmonary medicine**

Usually, breathing is effortless, but when an illness impedes breathing, it is time to seek the assistance of a pulmonologist: a doctor who specializes in lung and airway disorders.

Pulmonary physicians diagnose and treat lung diseases. They are trained in internal medicine, lungs, and the cardio-pulmonary system which is the lungs, heart, blood vessels, and all the organs that help a person breathe. Pulmonary physicians treat breathing disorders, chronic cough, severe allergies, asthma, sleep disorders, tuberculosis, lung abscesses, certain types of cancer, and lung diseases such as cystic fibrosis.

#### Pulmonary Physicians help patients who:

- Smoke
- Are overweight
- Have hypertension
- Have been exposed to asbestos, sawdust, or toxic chemicals
- Have diabetes or other diseases that may impact the lungs

### Chronic Obstructive Pulmonary Disease Diagnosis and Treatment

Bronchoscopy is a diagnostic procedure used to look inside the lungs' airways, called the bronchi and bronchioles. A tube with a tiny camera on the end is inserted through the nose or mouth into the lungs. The procedure provides a view of the airways of the lung and allows doctors to collect lung secretions or tissue specimens (biopsy).

Endobronchial ultrasound (EBUS) is a technique that uses ultrasound along with bronchoscope to visualize airway wall and structures adjacent to it. EBUS has high diagnostic informative value and low risk.

#### Types of medicines usually prescribed for COPD: Bronchodilators

Bronchodilators relax the muscles (bronchi and bronchioles) around the airways. When the airways are more open, it is easier to breathe. Bronchodilators can be inhaled via an inhaler or nebulizer machine that aerosolizes the medications.

#### **Anti-Inflammatories**

Anti-inflammatory medicines help by reducing the swelling and mucus production inside the airways. When that inflammation is reduced, it is easier to breathe.

