chaSEMINARS.com
2514 Stenson Dr | Cedar Park TX 78613 | 512-336-1005 | Fax 512-336-1008 | missy@CHAseminars.com

RESIDENT CHARACTERISTICS & ASSESSMENTS
COPD

UNDERSTANDING COPD

Chronic obstructive pulmonary disease kills over 100,000 Americans every year, making it the fourth leading cause of death in the United States. So what exactly is Chronic Obstructive Pulmonary Disease? Actually, Chronic Obstructive Pulmonary Disease, or COPD, refers to two different diseases of the lung, emphysema and chronic bronchitis. Since emphysema and chronic bronchitis are each usually caused by years of cigarette smoke, afflicted individuals are almost always diagnosed with both at once... hence the umbrella term, Chronic Obstructive Pulmonary Disease. This combination of diseases can also be caused by years of inhaling a variety of industrial toxins, fumes, and chemicals. Prolonged exposure to air pollution and second-hand smoke, or even a history of childhood lung infections can also lead to COPD. However, since chronic bronchitis and emphysema affect two different parts of the lung, let's take a separate look at each disease. Chronic bronchitis is characterized by an inflammation of the bronchial tubes, which are the passageways that branch off from the trachea, or windpipe, and allow air to enter the lungs. This inflammation causes thick mucus to build up in the tubes, preventing sufficient air from reaching the lungs. Emphysema occurs when the walls between the air sacs in the lungs, known as alveoli, lose their elasticity. This, in turn, causes the air sacs to become fragile and over-inflated, leading to an unnatural retention of air within the lungs. The symptoms of COPD tend to depend on which disease is more prominent in an afflicted individual. If emphysema is the predominant disease, the first noticeable symptom will be a shortness of breath during physical exertion. This will soon be followed by a phlegmatic cough and pursed-lip breathing. If chronic bronchitis predominates, a persistent, mucus-filled cough will often be the first symptom to appear. This may be accompanied by wheezing, shortness of breath, fatigue, and respiratory or lung infections. COPD is usually diagnosed based on an individual's medical history and an examination of his or her lungs. This lung examination can be done with chest x-rays, CAT scans and any number of pulmonary function tests, such as a spirometry. A spirometry measures the inhalations and exhalations of the lungs and the efficiency of their ability to transfer oxygen to the blood. There is no cure for Chronic Obstructive Pulmonary Disease. However, its destructive presence can be controlled and slowed with close medical attention, allowing those afflicted to lead longer, healthier lives. If you are concerned that you may have COPD, or are experiencing symptoms of either of its component diseases, please see your doctor or pulmonologist for a check-up immediately.

TREATING COPD

Over 12 million Americans currently suffer from the lung condition known as Chronic Obstructive Pulmonary Disease, but there are treatments that can help ease the symptoms. Chronic Obstructive Pulmonary Disease, or COPD, refers to a combination of two separate diseases which interfere with breathing: emphysema and chronic bronchitis. While there is no cure for COPD, there are a variety of treatments capable of controlling the diseases symptoms and slowing its debilitating effects. The first step in combating COPD is to stop smoking. Without the interference of cigarettes, prescription medications will be vastly more effective against the disease and lung detrition caused by years of smoking inhalation will be reduced. The most commonly prescribed medications for those afflicted with COPD are a group called bronchodilators. Bronchodilators, like Alupent and Proventil, relax the muscles around the bronchial tubes allowing air to flow unrestricted from the mouth to the lungs. There are three types of prescription bronchodilating drugs: beta 2-agonists which are available in both short and long acting forms, anticholinergics which are short acting and theophylline which is long acting. Short acting bronchodilators help relieve COPD suffers at the onset of an attack, while the long acting varieties help to prevent and control symptoms from developing. Since there are such a variety of bronchodilators, each with varying effects, your doctor will take your specific symptoms into account when deciding which medication or combination of medications is best for you. Another type

of drug used to relieve the symptoms of COPD are corticosteroids, which are sold under brand names like Pulmicort and Beclovent. Corticosteroids are anti-inflammatory drugs that work over an extended period of time to lessen the inflammation in the lungs. These medications are available in a variety of forms. Most can be taken through metered-dose inhalers, dry powder inhalers, or nebulizers, which deliver the medication in a very fine mist. Corticosteroids can also be prescribed in the more traditional pill or syrup form. Oxygen therapy is often used to supplement medication and involves supplying fresh oxygen directly to the patient. This therapy may be prescribed if appropriate levels of oxygen are not reaching the blood. Supplemental oxygen can help patients sleep better, complete daily activities with less difficulty, and even prolong their lives! As a last resort, surgery may be recommended for people with more severe cases of COPD. A common surgical option is lung volume reduction surgery, in which small areas of damaged lung tissue are removed. After this operation, the diaphragm will be able to contract more easily, allowing an improvement in the air flow to the lungs. In the most severe cases, it may be necessary for a patient to undergo a complete lung transplant operation. Remember, not every treatment or medication is right for everyone. It's important to discuss the pros and cons of every option with your doctor, and to follow your physicians' instructions exactly.

ACKNOWLEDGEMENTS

Joshua Fink, MD

Specialist in Pulmonary Surgery Cornell Medical Center

Joshua Fink, MD, recognized in 2008 as one of the best clinical instructor's in medical aesthetics, with an active following in both Westchester and Manhattan, is a Fellow of the American Society of Lasers in Medicine and Surgery, an Instructor for the American Academy of Aesthetic Medicine and a member of The International Society of Cosmetic and Laser Surgery, The American Society of Cosmetic, Dermatologic and Aesthetic Surgery and The American Academy of Aesthetic Medicine, as well as Chief Clinical Instructor for the International Association of Medical Aesthetic Professionals. Dr. Fink is also a Fellow of the American College of Chest Physicians.