

Exacerbation of Chronic Obstructive Pulmonary Disease

Harriet Monson*

Department of Pulmonary and Critical Care Medicine, Brigham and Women's Hospital, Boston, MA, USA

DESCRIPTION

COPD is a chronic inflammatory lung disease characterized by persistent and increasing airflow restriction. An increased chronic inflammatory response to ingested irritating particles or gases causes it. Different environmental exposures play a role in the progression of COPD, although smoking is by far the most important risk factor. The major goals of COPD care are to eliminate risk factors, limit side effects, slow the rate of lung function decrease, avoid exacerbations, and diagnose lung cancer early.

Cigarette smoking is commonly linked to this condition. Individuals with COPD who have not been exposed to any form of smoking are unusual. Individuals may experience varying degrees of COPD severity. When it reaches its maximum, it can make it difficult for people to go about their daily lives. Chronic Obstructive Pulmonary Disease (COPD) is an airway obstruction disease that can be prevented and treated.

The following are some of the symptoms and manifestations of COPD:

- Shortness of breath, especially during strenuous physical activity.
- Wheezing or a persistent cough.
- Tightness in the chest.
- A persistent cough that produces clear, white, yellow, or greenish mucus (sputum).
- Respiratory illnesses are common.
- A lack of vitality.
- Unintentional weight loss (in later stages).

Causes of airway obstruction

Emphysema: Emphysema is a lung disease that causes the delicate walls and elastic fibers of the alveoli to break down. When you exhale, your small airways compress, restricting airflow out of your lungs.

Chronic bronchitis: Chronic bronchitis causes your bronchial tubes to become inflamed and narrower, and your lungs generate more mucus, which can clog the restricted tubes even more. In an attempt to clean your airways, you acquire a chronic cough.

COPD is sometimes confused with chronic bronchitis (chronic cough and sputum production) and emphysema (alveolar damage). These two disorders frequently occur concurrently and vary in severity among COPD patients. Lung damage caused by chronic obstructive pulmonary disease cannot be reversed. Inhalers and oral or inhaled steroids can help reduce symptoms and prevent additional injury. Emphysema is defined by the loss of flexibility of the alveolar connections, or their destruction. COPD, unlike asthma, is irreversible.

COPD has four stages.

- COPD in Stage I is mild. Lung function is beginning to deteriorate, although you may not be aware of it.
- COPD in Stage II is moderate. Shortness of breath develops with exertion as the symptoms progress.
- COPD in Stage III is severe. COPD exacerbations are prevalent as shortness of breath worsens.
- COPD in Stage IV is very severe.

Chronic obstructive pulmonary disease (COPD) has a lot of risk factors.

- Contaminated air exposure.
- Inhaling smoke that has been recycled.
- Working with synthetics, residues, and exhaust.
- Alpha-1 deficiency is a genetic disorder.
- A history of respiratory problems in childhood.

COPD should be suspected in patients with risk factors who have persistent dyspnea, a chronic cough with or without sputum production, or a history of wheezing. COPD may be suspected based on findings from the history and physical examination; nevertheless, spirometry must be used to confirm the diagnosis and severity of COPD.

Treatment options

- Quitting Smoking
- Bronchodilators (inhaled)
- Corticosteroids inhaled
- Phosphodiesterase-4 Inhibitors (Oral)
- Oral Corticosteroids and Methylxanthines
- Oxygen Therapy for a Long Time
- Rehabilitation of the lungs

Correspondence to: Harriet Monson, Department of Pulmonary and Critical Care Medicine, Brigham and Women's Hospital, Boston, MA, USA, E-mail: hmonson@harvard.edu

Received: 21-Apr-2022, Manuscript No. ATBM-22-17908; **Editor assigned:** 26-Apr-2022, PreQC No. ATBM-22-17908 (PQ); **Reviewed:** 10-May-2022, QC No. ATBM-22-17908; **Revised:** 17-May-2022, Manuscript No. ATBM-22-17908 (R); **Published:** 25-May-2022, DOI: 10.35248/2379-1764.22.10.363.

Citation: Monson H (2022) Exacerbation of Chronic Obstructive Pulmonary Disease. Adv Tech Biol Med. 10:363.

Copyright: © 2022 Monson H. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

- Immunizations
- Antitussives, mucolytics, and antibiotics are all examples of antitussives.

CONCLUSION

COPD will continue to be a major healthcare issue for many years to come. Exacerbations of COPD are frequently caused by

airway infection and are a leading cause of morbidity, health impairment, and mortality. The basic goal for COPD care is to identify patients who are at risk early on and to reduce risk factors, particularly smoking. The importance of focusing on smoking cessation will have a significant impact on disease progression.