Chronic Obstructive Pulmonary Disease

COPD is a lung disease that makes it hard to breathe. It is caused by damage to the lungs over many years, usually from smoking.

✓ 12 million people in the U.S. diagnosed with COPD
✓ 4th leading cause of death, predicted to become the 3rd leading cause by 2020
✓ In 2010, the cost to the nation for COPD was about $49.9 billion

COPD is often a mix of two diseases with one being more prominent:

- CHRONIC BRONCHITIS: A state in which repeated injury and inflammation in the lungs impairs gas exchange

- EMPHYSEMA: Stiffness of alveoli that develops over time, rendering them unable to properly exchange oxygen and carbon dioxide

COPD has four stages:

STAGE 1 - Mild COPD: Lung Function 80% of normal
*Productive, chronic cough

STAGE 2 - Moderate COPD: Lung Function 50%-79%
*Chronic, productive cough
*SOB, especially with exercise
*COPD flare-up occasionally

STAGE 3 - Severe COPD: Lung Function 30%-49%
*Chronic, productive cough
*SOB, fatigue, reduce exercise ability
*Repeated and severe COPD flare-ups

STAGE 4 - VERY Severe COPD: Lung Function <30% or <50% with CRF
*Chronic, productive cough, severe SOB, cyanosis
*Life-threatening COPD flare-ups
*Weight loss
*Edema in legs/feet

Clinical Treatment

- Smoking Cessation
- Supplemental Oxygen to maintain >90% O2 saturation
- Medications: Bronchodilators, anti-inflammatories, expectorants
- Prevention of further lung damage, infections, and exacerbation management

Other Treatment

- Increase meal frequency while eating smaller, high-fat portions
- Pulmonary rehab as tolerated:
  *Upper extremity strengthening and ROM
  *Balance training
  *Diaphragmatic breathing to improve lung capacity
  *Pursed lip breathing to lengthen exhalation
- Educate patient and family
- Relieve anxiety and depression

References

- **American Medical Directors Association. (2010).** *COPD management in the long term care setting; clinical practice guideline.* **Columbia, MD.**
- http://www.webmd.com
- http://www.lung.org