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Asthma Chronic Obstructive Pulmonary Disease Overlap Syndrome

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### Introduction

Throughout recent years, asthma and chronic obstructive pulmonary disease (COPD) have been viewed as two separate diseases, with two separate pathophysiologies, and two different treatment plans, occasionally ignoring the possibility of dual diagnosis (Ramoscheguren, Esquinca, & Morrissette, 2015). In 2015, the Global Initiative for Chronic Lung Disease (GOLD) and Global Initiative for Asthma (GINA) acknowledged that patients could indeed have overlap pathology of COPD and asthma (GOLD & GINA, 2015). The GOLD and GINA collaboration to a common description of what is referred to as the asthma-COPD overlap syndrome (ACOS) is discussed in this paper.

### Underlying Pathophysiology

Asthma is defined as a heterogeneous disease, usually characterized by chronic airflow limitation (GOLD & GINA, 2015). It is defined by the history of respiratory symptoms such as wheeze, shortness of breath, tightness in the chest, and coughing that vary over time and intensity in combination with asthma-like symptoms usually precipitated and associated with increased bronchial responsiveness to a wide variety of inhaled irritants.

The pathophysiology of ACOS diagnosed with COPD is approximately 20% and unfortunately is characterized by persistent airflow limitation with several features usually associated with asthma and several features usually associated with COPD (GOLD & GINA, 2015).

### Significance of Pathophysiology

#### Signs and Symptoms

**Pathophysiology**

**Asthma Chronic Obstructive Pulmonary Disease Overlap Syndrome**

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**Signs and Symptoms of Asthma/COPD overlap syndrome and symptoms of both asthma and COPD:**

- **Signs and symptoms include:**
  - Variable respiratory airflow
  - Wheezing
  - Shortness of breath
  - Chest tightness
  - Gagging
  - Due to bronchial constriction, airway wall thickening, and mucus (GINA, 2017).

- **Signs and symptoms of COPD:**
  - Dyspneic progressive over time, worse with exercise and persistent
  - Chronic cough w/ or w/o sputum
  - Lower respiratory tract infections
  - History of exposure to smoke, dusts, vapors, fumes, or gases
  - Family history of COPD and/ or childhood factors (GOLD, 2017)

**Steps to the diagnosis of ACOS:**

1. Using the signs and symptoms of ACOS, assemble the features that, when present, most strongly identify the ACOS patient.
2. Compare the number of features on each side.
   - If the patient has 3 or more features of asthma or COPD, there is a strong likelihood that this is the correct diagnosis.
3. When a patient has a similar number of features of both asthma and COPD, consider a diagnosis of asthma-COPD overlap (GINA, 2017).

**References**


GOLD/Global Initiative for Chronic Obstructive Lung Disease (GOLD) & GINA Global Initiative for Asthma (GINA), (2017). Diagnosis of diseases of chronic airway limitation Asthma and chronic obstructive pulmonary disease (acos) Retrieved from https://asthma-gco-pd.org/Acopd/


 references_text=None