

Title: Managing chronic obstructive pulmonary disease (COPD) in primary care: Clinical characteristics of patients receiving inhaled corticosteroids (ICS)

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Abstract Text:

Purpose

ICS therapy in patients with COPD has been associated with a variety of unfavorable effects, including increased risk of pneumonia, and is only recommended if specific characteristics are present to ensure patients derive the most benefit. The purpose of this study was to examine current prescribing patterns for patients treated for COPD in the primary care setting in order to inform potential interventions for future improvement.

Methods

This study was a retrospective chart review of adults with COPD who were receiving ICS maintenance therapy. Data were collected for patients followed in two primary care clinics located within an academic medical center from January 1, 2019 to December 31, 2020. Patients without documented pulmonary function tests (PFTs) were excluded. Data analysis for this study was performed with descriptive statistics.

Results

A total of 100 unique patients with a diagnosis of COPD, who were prescribed an ICS were included in the study. Among patients evaluated, the most common duration of COPD diagnosis was 3 to 5 years and nearly half of participants were former smokers. Of the individuals receiving ICS therapy, all were in combination with a LABA, with 55% of patients also receiving a LAMA. Furthermore, 32% of patients visited the emergency department or were hospitalized for a COPD exacerbation within the previous year. Approximately 47% and 36% of patients had a history of pneumonia and an eosinophil count <100 cells/mcL, respectively, each factors suggestive of limited ICS benefit.

Conclusions

Based on study results, a large portion of patients with a diagnosis of COPD and receiving ICS therapy had no documented history of exacerbations within the last year, a history of pneumonia, and a low to moderate blood eosinophil count. These findings may imply that ICS therapy is overprescribed in the primary care setting, highlighting the need for innovative interventions to eliminate barriers and facilitate practice in accordance with clinical guidelines.