Prevalence of Asthma (Reversibility) in Latin American Adults and Its Overlap with Diagnosis of COPD

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Introduction

Literature on asthma/reversibility in population-based studies is scarce. Definition of asthma/reversibility and its overlap with COPD is a controversial theme on the literature.

Objective

To evaluate the prevalence of asthma using several diagnosis criteria and to analyze the overlap between asthma/reversibility and COPD by spirometric criteria.

Methods

A multicenter study (the PLATINO project) was carried out in five Latin America cities: São Paulo, Mexico city, Montevideo, Santiago and Caracas. Individuals aged ≥40 years performed pre and post-BD spirometry and answered the ISAAC questions about asthma. Reversibility was defined as a difference between post and pre BD FEV1 or FVC of 200 mL and 12%.

Results

A total of 5,183 subjects performed spirometry from a representative and eligible population of 5,315 adults aged ≥40 years.

- Wheezing 12 months: 23.7%
- Medical diagnosis asthma: 12.1%
- Significant reversibility: 10.3%
- Wheezing + reversibility: 3.4%

Prevalence of outcomes

Reversibility versus COPD as defined by the FR criterion. The PLATINO study.

Reversibility versus COPD as defined by the LLN criterion. The PLATINO study.

Discussion

The symptom of wheezing does not correlate strongly with reversibility in spirometry.

From those with asthma (wheezing + reversibility) and COPD (FR) together – only 1.9% of the sample had both diseases.

However, out of all asthmatic subjects, over half also presented COPD.

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