



# Is Asthma and COPD Overlap Syndrome Weather and Environment Sensitive?

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We read with great interest the article recently published by Daher et al entitled “Characterization and Triggers of Dyspnea in Patients with Chronic Obstructive Pulmonary Disease or Chronic Heart Failure: Effects of Weather and Environment” [1].

In this study, chronic obstructive pulmonary (COPD) patients were shown to be much more sensitive to different air and environmental factors than patients with heart failure (HF). Asthma and COPD overlap syndrome (ACOS) have recently attracted attention. The disease is defined in two steps. The first step is to identify the history of chronic airway disease, i.e., the history of chronic or recurrent cough, sputum production, wheezing, and recurrent acute lower respiratory tract infections. In the second stage, asthma and COPD-related characteristics which explain the patient best (age at onset, symptom pattern, results of pulmonary function tests, and findings on chest X-rays) were defined, compared, and diagnosed [2]. Sin et al. reported that, the diagnosis of ACOS could be made in case of three major and at least one minor criteria being met [3].

## Major Criteria

1. Persistent airway restriction over 40 years of age (post bronchodilator FEV1/FVC < 0.70).

2. Exposure to pollutants such as biomass or smoking for at least 10 years.
3. Diagnosis of asthma before 40 years old or BDR > 400 mL in FEV1.

## Minor Criteria

1. History of atopy or allergic rhinitis.
2. Having BDR > 200 mL in FEV1 in two or more visit.
3. Having blood eosinophil level  $\geq 300$  cells  $\mu\text{L}$ .

BDR: Bronchodilator response after 400  $\mu\text{g}$  albuterol/salbutamol or equivalent.

We know that asthma can be more triggered by environmental factors such as perfume and changes in weather, when compared to COPD [4].

From this point of view, we can predict that patients with ACOS may be more sensitive to environmental triggers and weather changes in comparison to COPD.

In conclusion, in this study, we think that those having ACOS criteria among COPD patients may have an effect on the results.

## Compliance with Ethical Standards

**Conflict of interest** All authors declare no conflict of interest.

## References

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