

## Are the Diagnostic Criteria for Asthma–COPD Overlap Syndrome Appropriate in Biomass Smoke-induced Chronic Obstructive Pulmonary Disease?\*



### ¿Son adecuados los criterios diagnósticos del fenotipo mixto EPOC-asma en la enfermedad pulmonar obstructiva crónica por humo de biomasa?

To the Editor,

Our scientific community agrees that some patients present overlapping features of chronic obstructive pulmonary disease (COPD) and asthma. The Spanish COPD guidelines (GesEPOC)<sup>1</sup> call this the mixed COPD–asthma phenotype, but it is known internationally as asthma–COPD overlap syndrome (ACOS). Its prevalence has not been well defined, and various studies report differences in sex and age.<sup>2</sup> Variations in the prevalence of ACOS are primarily due to discrepancies among the consensus-based diagnostic criteria.<sup>2,3</sup> Indeed, in a Canadian study, prevalence ranged between 5% and 27% depending on the diagnostic criteria applied.<sup>4</sup> According to clinical guidelines, significant criteria for establishing a diagnosis of ACOS include a previous diagnosis of asthma and, particularly, early onset of respiratory symptoms.<sup>1,2</sup>

The studies cited above mainly focus on COPD caused by tobacco smoke. We know, however, that exposure to biomass smoke is a major cause of COPD, although the characteristics of this entity remain to be defined. Specifically, little information is available on the prevalence of ACOS in COPD caused by biomass smoke. In a study conducted by our group, we found a 21.3% prevalence of ACOS in patients with COPD caused by biomass smoke, compared to 5% in COPD caused by tobacco, but these differences may be related to an uneven gender distribution in study groups.<sup>5</sup> In this study, we used modified GesEPOC criteria to diagnose ACOS; however, the retrospective nature of the study was a major limitation, and prevented us from systematically investigating all possible diagnostic criteria in each case. The diagnostic factor most frequently used was personal history of asthma, based primarily on onset of respiratory symptoms before the age of 40 years. However, this

\*Please cite this article as: Golpe R, Pérez de Llano L. ¿Son adecuados los criterios diagnósticos del fenotipo mixto EPOC-asma en la enfermedad pulmonar obstructiva crónica por humo de biomasa?. Arch Bronconeumol. 2016;52:110.

## Usefulness of Biomarkers as Prognostic Factors of Mortality in Elderly Patients with Community-acquired Pneumonia\*



### Utilidad de los biomarcadores como factores pronósticos de mortalidad en los pacientes ancianos con neumonía adquirida en la comunidad

To the Editor,

We read with great interest the study of Calle et al.,<sup>1</sup> recently published in ARCHIVOS DE BRONCONEUMOLOGÍA, which analyzes the

\* Please cite this article as: Julián-Jiménez A, Rodríguez EV, Magdaleno RES, Martín BC. Utilidad de los biomarcadores como factores pronósticos de mortalidad en los pacientes ancianos con neumonía adquirida en la comunidad. Arch Bronconeumol. 2016;52:110–111.

criterion may not be applicable to COPD caused by biomass smoke, since, unlike tobacco, exposure to this noxious substance typically begins in early childhood, a crucial stage in the development of the respiratory system. For this reason, early onset is a specific feature of COPD caused by biomass smoke, and does not constitute a reliable indicator of coexisting asthma in this population. ACOS, then, may have been overdiagnosed in our series, and we must question whether the usual diagnostic criteria are applicable in this COPD subtype.

We believe research should be undertaken to identify biomarkers that would allow ACOS to be reliably differentiated in populations with different risk factors for the disease. The clinical implications are obvious, because ACOS patients and particularly those with COPD caused by biomass smoke have typically been excluded from clinical studies, resulting in a scarcity of scientific evidence on which to base therapeutic decisions.

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relationship between mortality and geriatric assessment parameters and standard clinical variables in very elderly patients with community-acquired pneumonia (CAP). The authors conclude their article by saying that age and other clinical, laboratory and geriatric assessment parameters, such as functional capacity, are useful for predicting mortality in the short term.

We have few points we would like to add to this report. In the last 10 years, the incidence of CAP seen in emergency departments in Spain has increased from 0.85% to 1.35% ( $P < .001$ ).<sup>2</sup> In total, 51% of CAPs were recorded in patients aged 70 years and older, and clinical presentation and mortality were significantly worse in this population than in patients aged 15–69 years ( $P < .001$ ).<sup>2</sup> These data have generated a growing awareness of the need for an accurate prognosis of mortality in elderly patients. Some biomarkers have proven useful as independent predictors of mortality in CAP patients,<sup>3,4</sup> but reports of varying results in elderly individuals and other adults<sup>5</sup> have raised questions about the usefulness of these biomarkers in patients of different ages.