



Editorial

GOLD 2017: The Spanish Perspective[☆]

GOLD 2017: la visión desde España

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In March of this year, ARCHIVOS DE BRONCONEUMOLOGÍA published the executive summary of the GOLD 2017 (Global Strategy for the Diagnosis, Management, and Prevention of Chronic Obstructive Lung Disease) report. This was an important step, as previous GOLD executive summaries have been published exclusively in the American Journal of Respiratory and Critical Care Medicine, thus limiting access to this document by Spanish pulmonologists. We are confident that publishing this summary will facilitate the dissemination and implementation of GOLD 2017 in both Spain and Latin America.

The first edition of GOLD was published in 2001 with the aim of providing an unbiased review of the available scientific evidence on the management, diagnosis and treatment of patients with chronic obstructive pulmonary disease (COPD). Since then, it has been used as a "strategic document" to raise awareness of COPD as one of the most important diseases worldwide, and major revisions have been made every 5 years (2006, 2011 and now, 2017 [presented in November 2016]).

In this latest version of GOLD, the chapter on pathogenesis is among those that have been extensively revised, particularly with regard to risk factors, such as exposure to biomass fuel, environmental pollution and occupational exposure. Although biomass fuel is a particularly important risk factor in developing countries, it can also have a significant effect in the industrialized world. In Spain, around 20% of the population is also exposed to tobacco smoke, most notably in the workplace.¹ In rural areas, however, where biomass fuels are frequently used for cooking and heating, roughly 1 in 4 (24.4%) COPD patients could present biomass combustion as a risk factor.²

Another interesting aspect of the new GOLD 2017 report is the emergence of the concept of "abnormal lung growth" as a risk factor for COPD. Any exposure that affects lung growth during pregnancy and the early years of life, such as the individual's genetic makeup and/or passive exposure to tobacco smoke,

poor diet and/or respiratory infections, can lead to poor lung development in childhood, culminating in the onset of COPD in adulthood. As shown in the GOLD 2017 report, nearly half of all subjects with low FEV1 values present suboptimal lung growth with no accelerated decline in lung function.³ These findings have raised the question of whether lung function tests should be performed in adolescence in order to compare baseline FEV1 with values in adulthood, and thus obtain a more accurate picture of lung function decline.

The "ABCD" clinical evaluation system used to guide the pharmacological treatment of COPD patients first appeared in GOLD 2011, and was a major improvement over the previous FEV1-based approach (GOLD 2006) in patients with stable disease. However, it had a number of limitations, namely, the confusion created by the use of 2 vertical axes, the lack of supporting scientific evidence, and its inability to predict survival more accurately than the FEV1 or the BODE index.⁴ Although FEV1 has been removed from the ABCD system in the new GOLD 2017 report, spirometry continues to play a key role in the diagnosis and prognosis of the disease. This will definitely extend the use of this tool in daily clinical practice, although prospective studies are needed to validate its prognostic value. According to the recent EPOCONSUL study,⁵ dyspnea is evaluated in 82% of patients followed up in outpatient pulmonary clinics in Spain and exacerbation history is collected in 71%. The ABCD system could be applied in these cases, but it is currently only used in 21.9% of patients.

The chapter dealing with the management of stable COPD has drawn on new data to revise recommendations on pharmacological and non-pharmacological treatments. The role of long-acting bronchodilators, starting with a LAMA or LABA, has been emphasized, and if symptoms or exacerbations persist, a LAMA+LABA combination should be given. Unlike the 2011 edition, the option of starting treatment with a long-acting bronchodilator is included in group A patients.

An analysis of initial treatment patterns in newly diagnosed COPD patients in Spain showed that the use of inhaled corticosteroids (ICS), although still excessive,⁶ has decreased, mainly in non-exacerbators. This suggests a trend toward prioritizing bronchodilation (single or dual) over ICS, which is in line with GOLD recommendations. The use of ICS in all patients with severe

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exacerbations been questioned for the first time in this latest version of GOLD. According to the latest data,⁷ the use of dual bronchodilator therapy (LABA+LAMA) significantly reduced the risk of moderate–severe exacerbations compared to the LABA+ICS combination. For the first time, the 2017 version also mentions peripheral blood eosinophilia as a possible biomarker of response to ICS (pending confirmation in prospective studies), and provides data from studies that showed that the higher the blood eosinophil counts, the more effective the ICS+LABA combination in reducing exacerbations. The report also suggests “withdrawing” ICS in patients in whom the therapy is not beneficial. Withdrawal of ICS, however, is not clearly defined in the report, most likely due to lack of evidence, and the risk-benefit ratio should probably be evaluated on the basis of an eosinophil count range instead a definitive cut-off point. What seems clear is that patients with elevated eosinophils are at increased risk of exacerbations.⁸ A recent study has shown that variables, such as advanced age or male sex, may be associated with greater variability in long-term blood eosinophil levels,⁹ and these factors should be taken into account when using this biomarker to evaluate the benefit of ICS.

Management of COPD in Spain is based on 2 strategies: GesEPOC and GOLD. Earlier versions of these guidelines proposed different therapeutic approaches for the same patient, which has led to confusion. We hope that this new GOLD report and the upcoming GesEPOC guidelines will converge to unify diagnostic and therapeutic criteria.

In conclusion, the GOLD 2017 report proposes a simpler, more personalized approach to diagnosis and treatment that can be applied anywhere in the world. Its recommendations are

applicable in Spain, and its therapeutic approach is in line with current pharmacological trends.

References

1. López-Campos JL, Fernández-Villar A, Calero-Acuna C, Represas-Represas C, López-Ramírez C, Fernández VL, et al. Occupational and biomass exposure in chronic obstructive pulmonary disease: results of a cross-sectional analysis of the on-sint study. *Arch Bronconeumol.* 2017;53:7–12.
2. Golpe R, Sanjuán López P, Cano Jiménez E, Castro Añón O, Pérez de Llano LA. Distribution of clinical phenotypes in patients with chronic obstructive pulmonary disease caused by biomass and tobacco smoke. *Arch Bronconeumol.* 2014;50:318–24.
3. Lange P, Celli B, Agustí A, Boje Jensen G, Divo M, Faner R, et al. Lung-function trajectories leading to chronic obstructive pulmonary disease. *N Engl J Med.* 2015;373:111–22.
4. De Torres JP, Casanova C, Marin JM, Pinto-Plata V, Divo M, Zulueta JJ, et al. Prognostic evaluation of COPD patients: GOLD 2011 versus BODE and the COPD comorbidity index COTE. *Thorax.* 2014;69:799–804.
5. Calle Rubio M, Alcazar Navarrete B, Soriano JB, Soler-Cataluna JJ, Rodríguez González-Moro JM, Fuentes Ferrer ME, et al. Clinical audit of COPD in outpatient respiratory clinics in Spain: the EPOCONSUL study. *Int J Chron Obstruct Pulmon Dis.* 2017;12:417–26.
6. Barrecheguren M, Monteagudo M, Ferrer J, Borrell E, Llor C, Esquinas C, et al. Treatment patterns in COPD patients newly diagnosed in primary care. A population-based study. *Respir Med.* 2016;111:47–53.
7. Wedzicha JA, Banerji D, Chapman KR, Vestbo J, Roche N, Ayers RT, et al. Indacaterol-glycopyrronium versus salmeterol-fluticasone for COPD. *N Engl J Med.* 2016;374:2222–34.
8. Vedel-Krogh S, Nielsen SF, Lange P, Vestbo J, Nordsgaard BG. Blood eosinophils and exacerbations in COPD: the Copenhagen General Population Study. *Am J Respir Crit Care Med.* 2016;193:965–74.
9. Oshagbemi OA, Burden AM, Braeken DCW, Henskens Y, Wouters EFM, Driessens JHM, et al. Stability of blood eosinophils in patients with chronic obstructive pulmonary disease and in control subjects, and the impact of gender, age smoking and baseline counts. *Am J Respir Crit Care Med.* 2017;195:1402–4.