



Editorial

Smoking in COPD Patients: A New Clinical Phenotype? ☆

Tabaquismo en pacientes con EPOC, ¿un nuevo fenotipo clínico?

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Chronic obstructive pulmonary disease (COPD) is a common, preventable, and treatable disease. The major cause of COPD is smoking, which is responsible for 85% of cases, and 20% of smokers can expect to develop COPD at some time during their life. Exposure to tobacco smoke before birth, in childhood and in adolescence can affect pulmonary growth.¹ In adults, passive smoking also contributes to the symptoms and development of COPD.

Although most smokers want to give up, very few receive dedicated medical help to quit. Recently, the European Commission Eurobarometer² documented that in Spain only 1 in 10 smokers who stopped smoking did so with the help of their doctor, a figure well below that of other European countries, such as the United Kingdom.

In 2016, 2.9 million people died worldwide as a result of COPD, and this disease was the sixth cause of death. The World Health Organization has predicted that in 2030 it will be responsible for 8.3% of all deaths, and will be the third cause of death.³

The prevalence of COPD in individuals between 40 and 80 years of age in Spain is 10.2%.⁴ The EPI-SCAN study showed that in Spain, 2 million individuals (25% women) have COPD. Up to 73% of patients are unaware that they have the disease, do not receive treatment for it, and often continue to smoke.⁵

Helping patients to stop smoking is the most important intervention in COPD. Until now, however, this has not been a priority among European pulmonologists,⁶ and as a result, more than a third of COPD patients continue their habit. Treatment of smoking is a very cost-effective intervention that helps reduce the risk of developing COPD and limits the progress of already established disease.^{6–8} In an international multicenter study, 40% of participants with moderate to severe COPD were smokers.⁹ Similarly, according to data from the AUDIPOC study, almost 25% of patients admitted for a COPD exacerbation are active smokers.¹⁰

The benefits of stopping smoking on FEV₁ decline and on COPD prognosis are well established in the literature,^{7,8} and similar

benefits have also been documented recently with respect to hospitalization rates. A Danish study that included more than 19 000 participants with 1260 hospitalizations in a follow-up period of 14.4 years showed that stopping smoking was associated with a reduction in the risk of hospital admission (HR: 0.57; 95% CI: 0.33–0.99).¹¹

Treatment of smoking is the most important and cost-effective intervention in COPD. Smoking cessation is the only effective preventive measure for delaying the progressive development of this disease,^{7,8} and has a decisive impact on the reduction of mortality. It is surprising then to note the high rate of smoking among COPD patients, and the lack of care routinely offered by specialists.

The recent update of the GOLD document (Global Strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease 2017 report) represents a considerable advance in the prevention and treatment of COPD. The most important contribution is the summary of therapeutic options for severity groups A–D. Yet, although the full document mentions the implementation of anti-smoking strategies in all scenarios, the topic occupies only 19 lines of the executive summary that was published in all the major respiratory medicine journals.¹²

However, if effective resources and time are devoted to smoking cessation, outcomes are encouraging.¹³ Nicotine replacement therapy, bupropion, varenicline, and in some patients nortriptyline, increase long-term abstinence rates, but must not be used as a single intervention without follow-up. Surprisingly, these medications have been well studied in numerous controlled clinical trials, but very few have been conducted in COPD patients. Smokers with COPD have specific characteristics associated with their smoking habit which confer them particular difficulties for quitting, but very few studies have attempted to identify the reasons for this phenomenon.

The Spanish COPD Guidelines (GesEPOC) were the first to propose phenotype-guided management, an approach that has been adopted by the national COPD guidelines of several European countries.¹⁴ GesEPOC describes the clinical phenotype as those features of the disease which, alone or in combination, define differences between individuals with COPD in terms of clinically significant parameters. The guidelines recommend identifying the phenotype and prescribing a targeted, specific treatment for each case. The 2017 edition of the GesEPOC recognizes 4 phenotypes:

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(1) non-exacerbator, (2) asthma-COPD overlap (ACO), (3) exacerbator with emphysema, and (4) exacerbator with chronic bronchitis.

In short, while smokers with COPD do not strictly meet the established criteria for a disease phenotype, as smoking is not a feature of the disease as such, evidence supports the notion that the identification of “COPD+smoking” in the initial classification may contribute to improving treatment, since it is useful for assigning patients to a subgroup with a certain prognosis that can help guide the physician towards the most appropriate therapy, which must include the systematic, routine treatment of smoking. Thus, in order to comply with the first of the 10 commandments of COPD,¹⁵ we urge that smoking is included in the initial classification.

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