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Editorial

Towards a Consensus on Advanced COPD: A Call for Definition and Management

Hacia un consenso sobre la EPOC avanzada: una invitación a la definición y su manejo

Chronic obstructive pulmonary disease (COPD) is among the most prevalent and complex chronic conditions worldwide, imposing a significant burden in terms of morbidity, mortality, and impaired quality of life.[1] Despite advances in early detection, pharmacological therapy, and modification of risk factors—particularly smoking cessation—a substantial proportion of patients progresses to a more severe stage of the disease. This stage, commonly referred to as "advanced COPD," remains insufficiently defined and is typically characterized by persistent disabling dyspnea, severe airflow limitation, chronic respiratory failure, frailty, and progressive functional dependence, despite optimized medical management.[2] The risk of death in this patient population is notably high, leading some authors to advocate for the use of the term "*end-of-life*" to better reflect this stage and to facilitate the implementation of palliative care measures.[3] However, the concept of advanced COPD extends beyond the strict *end-of-life* definition used in palliative care literature, encompassing patients with severe disease burden and functional decline, who may remain clinically stable for variable periods of time. Nonetheless, a major challenge in recognizing this period lies in the inherent uncertainty surrounding individual prognosis. While several multidimensional indices have shown a robust association with mortality in COPD,[4,5] their discriminatory capacity to predict short-term survival at the individual level remains suboptimal.[6]

The lack of a universally accepted definition and standardized diagnostic criteria has long hindered clinical decision-making, delayed the timely initiation of palliative interventions, and restrict the development of targeted clinical trials.

To address this gap, a multidisciplinary panel of experts developed a Delphi consensus aiming to establish agreement on key aspects related to the definition and management of advanced COPD.[7] A total of 105 items were evaluated through a structured two-round Delphi methodology, addressing four major domains: the definition of advanced COPD, dyspnea management, strategies for preventing and recovering from exacerbations, and approaches to coping with disease progression. Consensus was reached on 77.1% of items. In this context, one of the most significant contributions is the definition it proposes for advanced COPD. According to the panel, advanced COPD is defined as a patient with $FEV_1 < 50\%$, plus at least two of the following criteria: severe dyspnea (mMRC grade 3–4), chronic respiratory insufficiency, and limitation in basic daily activities. This definition, which reached consensus among 91.5% of the participating experts, provides a practical and clinically relevant framework that enables more consistent patient identification, guides treatment decisions, and lays the foundations for future research focused on this especially vulnerable population.

Effectively addressing advanced COPD requires a multidimensional care strategy that extends beyond pharmacological escalation. In these patients, dyspnea stands out as one of the most prevalent and debilitating symptoms, impairing both physical function and emotional well-being.[2,8] The Delphi panel supports an integrative approach to its management, emphasizing the role of pulmonary rehabilitation, and, in selected cases, long-term oxygen therapy or home high-flow therapy. Active screening for and management of cardiovascular disease, such as heart failure, is also recommended. In patients with persistent refractory dyspnea despite maximal therapy, the use of rapid-release opioids was also endorsed. Although effective pharmacologic relief of breathlessness remains challenging, opioids are frequently recommended. Evidence from several studies suggests that, when appropriately titrated, low-dose opioids can safely relieve symptoms and improve quality of life without increasing mortality.[9] However, caution is warranted, as high-quality evidence is still limited, primarily because most randomized controlled trials conducted to date have been small, short in duration, and statistically underpowered, yielding inconsistent results.[10] These findings highlight the urgent need for pragmatic clinical trials focused on symptom relief and outcomes that reflect the real-life priorities and needs of patients with advanced COPD.[9,11]

Preventing and recovering from exacerbations was another key focus in the Delphi initiative, with high consensus on the importance of proactive follow-up post-hospitalization, early incorporation into rehabilitation programs during convalescence, and optimization of maintenance therapy or systematic comorbidity assessment. In parallel, the panel emphasized the relevance of anticipating disease progression, rather than merely reacting to its consequences. Structured advance care planning, early referral to palliative care, and routine assessment of comorbidities and frailty were among the core recommendations, particularly given the latter affects more than 50% of patients with advanced COPD and is associated with worse clinical outcomes.[12] Fig. 1 summarizes an integrated framework for the identification and management

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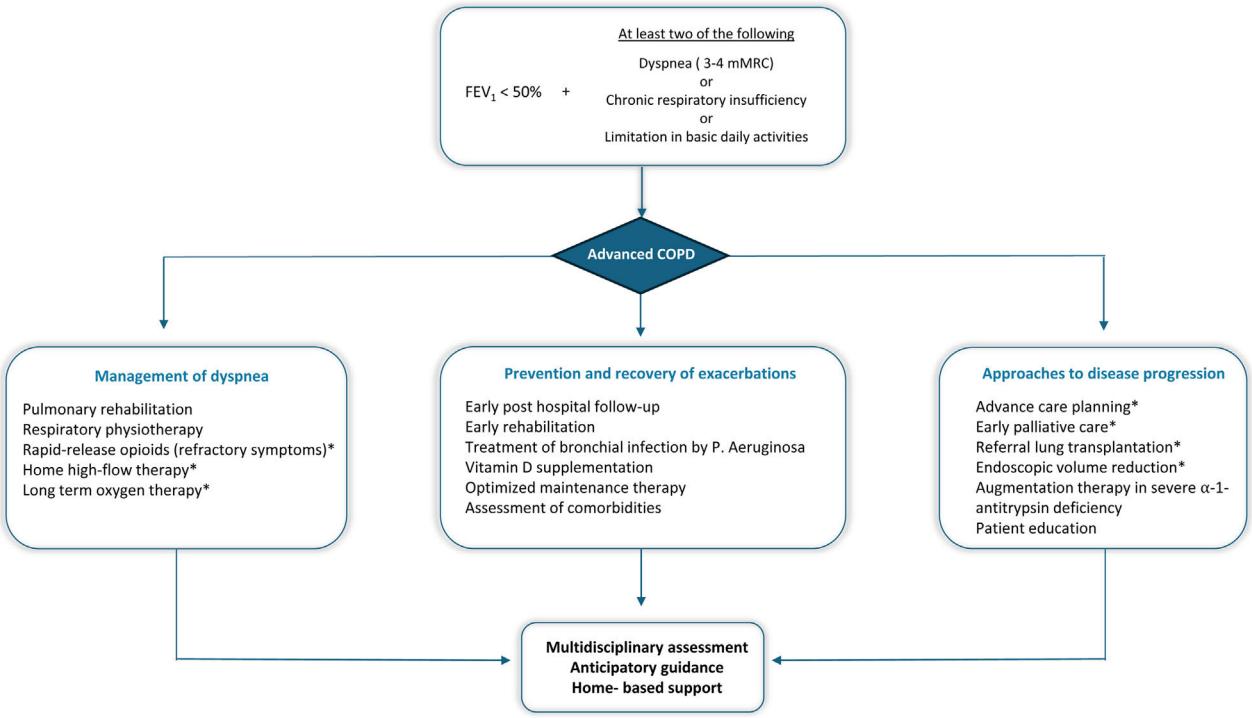

Fig. 1. Integrated management algorithm for advanced COPD. Algorithm proposed by the authors for the identification and management of advanced COPD. The figure integrates the main findings and recommendations from the Delphi consensus.[7] *Asterisk* (*) indicates measures particularly relevant or specific to patients with advanced COPD.

of advanced COPD, derived from the main findings and recommendations of the recent Delphi consensus.[7] The figure presents a stepwise approach that encompasses diagnostic criteria, multidimensional assessment, symptom-oriented treatment, prevention and recovery from exacerbations, and the early incorporation of palliative care. It is intended to offer clinicians a concise and pragmatic overview that translates the conceptual consensus into structured, real-world clinical decision-making.

Several of the actions depicted—such as pulmonary rehabilitation, maintenance therapy optimization, and comorbidity assessment—are recommended throughout the COPD continuum; however, in advanced disease, they acquire particular relevance due to their impact on symptom relief, prevention of deconditioning, and overall quality of life.

In recent years, the ethical and clinical imperative to integrate palliative care into the management of advanced COPD is increasingly recognized. This patient population, often overlooked by conventional care models, experiences a substantial burden of persistent symptoms, particularly refractory dyspnea, fatigue, anxiety, and depression, that severely impair function and quality of life, even under optimal pharmacologic treatment.[13] Palliative care should not be reserved exclusively for the terminal phase but rather incorporated as an anticipatory and integral component of care throughout the disease trajectory. A proactive approach is essential to ensure patients receive not only disease-modifying therapies, but also compassionate, goal-concordant support. Despite this need, the delivery of palliative care remains markedly inadequate. Fewer than 20% of patients with COPD receive palliative care before death, and when provided, it is often initiated only in the final weeks, contrasting sharply with the care routinely offered to patients with cancer.[14] Highlighting the magnitude of the problem, Andreas et al.[15] reported that nearly 50% of hospitalized patients with COPD met criteria indicative of a limited prognosis and potential eligibility for palliative care, yet none received it. Overcoming this deficiency will require not only clearer prognostic tools and greater clinical awareness, but also a cultural shift toward recognizing advanced COPD as a condition warranting early, integrated palliative care interventions.

Taken together, current estimates suggest that approximately 25% of patients with COPD may meet criteria for advanced disease,[16] yet this stage remains insufficiently defined in major clinical guidelines. This conceptual and operational gap has contributed to the underrecognition of patients with the highest symptom burden and most complex care needs, limiting their inclusion in clinical trials and delaying the implementation of appropriate therapeutic and supportive strategies. The Delphi consensus offers a crucial step forward by proposing a pragmatic, multidimensional definition that enhances the identification of affected individuals and supports a more structured, consistent approach to their management. Establishing such a framework is essential to ensure equity, improve outcomes, and elevate the standard of care for this particularly vulnerable population.

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JJSC and MS participated in the manuscript writing.

Conflicts of interest

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