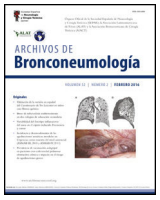
Archivos de Bronconeumología xxx (xxxx) xxx–xxx

Sociedad Española de Neumología y Cirugía Torácica SEPAR

ARCHIVOS DE
Bronconeumología

www.archbronconeumol.org



Discussion Letter

Comment on "Multidisciplinary Management of Patients With Chronic Obstructive Pulmonary Disease and Cardiovascular Disease"

To the Director,

The special article "Multidisciplinary Management of Patients with Chronic Obstructive Pulmonary Disease and Cardiovascular Disease" represents an interesting and much-needed effort to create a comprehensive guideline on an important yet somewhat neglected topic.[1] However, we would like to make some considerations regarding the manuscript.

The authors have discussed the potential risks of pulmonary toxicity associated with commonly used cardiovascular drugs such as amiodarone and beta-blockers, as well as the cardiovascular risks of respiratory medications like bronchodilators. Long-term use of azithromycin is recommended for COPD patients with chronic bronchial infection and frequent exacerbations[2]; however, there are concerns about serious adverse cardiovascular effects due to its potential proarrhythmic effects, especially in patients with a high baseline risk of cardiovascular disease.[3] Therefore, it is advisable to use this antibiotic with caution in patients with cardiovascular disease, avoiding its use in those with a prolonged QT interval in their electrocardiogram, and to monitor the QT interval after initiating treatment.

Furthermore, theophylline is recommended as a third-line therapy for COPD patients with uncontrolled dyspnea.[2] As theophylline has a narrow therapeutic window and can cause cardiac arrhythmias, it should be avoided or closely monitored in patients with cardiovascular disease, especially those who are taking multiple medications due to potential interactions.

Regarding the recommendation stated in Table 3 of prescribing triple therapy for COPD exacerbators to reduce exacerbations and mortality, we believe that it should be somewhat tempered. We agree with the authors comment that the benefits of triple therapy over double bronchodilation (LABA plus LAMA) in COPD are mostly seen in exacerbator patients with a baseline blood eosinophil count of 100 cells/mm^3 or higher.[1] Taking into account the broad audience of the manuscript beyond the pulmonology field, it may be advisable to explicitly state caution in using triple therapy in patients with low eosinophil counts. These patients are unlikely to benefit from inhaled corticosteroids (ICS), which may have significant adverse effects, particularly in patients with cardiovascular disease. There is controversy surrounding the potential impact of prolonged use of inhaled ICS on worsening diabetes mellitus (DM) control or increasing the incidence of DM.[4] DM is both a cardiovascular risk factor and a risk factor for exacerbation and death in COPD.[5] Therefore, caution should be exercised when considering long-term use of ICS, especially in those patients with poor glycemic control since this could promote respiratory infection or chronic bronchial colonization, including those caused by potentially pathogenic microorganisms (i.e. *Pseudomonas aeruginosa*), which has been associated with an increased risk of cardiovascular events.

Artificial intelligence involvement

No AI tool or software has been used to produce this manuscript.

Funding

This manuscript has received no funding.

Conflicts of interest

Rafael Golpe declares that he has received speaking or advisory fees, or economic aid to attend congresses from Astra-Zeneca, GSK, Novartis, FAES, Chiesi, Mundipharma, Menarini, TEVA, Grifols, Ferrer, Boehringer-Ingelheim, Rovi, and Gebro.

Juan Marco Figueira-Gonçalves has received speaking or advisory fees, or economic aid to attend congresses from Laboratorio Esteve, Mundipharma, Astra-Zeneca, Boehringer-Ingelheim, Ferrer, Menarini, Rovi, GlaxoSmithKline, Chiesi, Novartis y GebroPharma.

References

1. de Miguel-Díez J, Núñez Villota J, Santos Pérez S, Manito Lorite N, Alcázar Navarrete B, Delgado Jiménez JF, et al. Multidisciplinary management of patients with chronic obstructive pulmonary disease and cardiovascular disease. Arch Bronconeumol. 2024. S0300-2896(24)00015-2.
2. Miravitlles M, Calle M, Molina J, Almagro P, Gómez JT, Trigueros JA, et al. Spanish COPD Guidelines (GesEPOC) 2021: updated pharmacological treatment of stable COPD. Arch Bronconeumol. 2022;58:69–81.
3. Ray WA, Murray KT, Hall K, Arbogast PG, Stein CM. Azithromycin and the risk of cardiovascular death. N Engl J Med. 2012;366:1881–90.
4. See KC. Impact of inhaled and intranasal corticosteroids on glucose metabolism and diabetes mellitus: a mini review. World J Diabetes. 2023;14:1202–11.
5. Castañ-Abad MT, Montserrat-Capdevila J, Godoy P, Marsal JR, Ortega M, Alsedà M, et al. Diabetes as a risk factor for severe exacerbation and death in patients with COPD: a prospective cohort study. Eur J Public Health. 2020;30:822–7.

Rafael Golpe [a,*], Juan Marco Figueira-Gonçalves [b,c]

[a] *Servicio de Neumología, Hospital Universitario Lucus Augusti, Lugo, Spain*
[b] *Servicio de Neumología y Cirugía Torácica, Hospital Universitario Nuestra Señora de Candelaria, Santa Cruz de Tenerife, Spain*
[c] *University Institute of Tropical Disease and Public Health of the Canary Islands, University of La Laguna, Santa Cruz de Tenerife, Spain*

Corresponding author.
E-mail addresses: rafagolpe@gmail.com, rafael.golpe.gomez@sergas.es (R. Golpe).

https://doi.org/10.1016/j.arbres.2024.03.008

Please cite this article as: R. Golpe and J.M. Figueira-Gonçalves, Comment on "Multidisciplinary Management of Patients With Chronic Obstructive Pulmonary Disease and Cardiovascular Disease", Archivos de Bronconeumología, https://doi.org/10.1016/j.arbres.2024.03.008