Doxofylline in acute exacerbation of chronic obstructive pulmonary disease

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Dear Editor,

We have read with great interest the article entitled "Efficacy and safety of combined doxofylline and salbutamol in treatment of acute exacerbation of chronic obstructive pulmonary disease" by Xianrong Du et al.¹. We thank the authors for their study on a condition that has high morbidity and mortality and is one of the major reasons for admission to the emergency department worldwide^{2.3}. However, we would like to make some remarks.

Methylxanthines were used in acute exacerbation of chronic obstructive lung diseases (AECOPD) for many years. But many studies revealed that methylxanthines play no role in AECOPD. There are continuous drawbacks on its use because of its side effects such as nausea, tremors, and dysrhythmias⁴. In the introduction of this article, the authors state that methylxanthines are commonly used as bronchodilators, but current guidelines do not suggest the use of methylxanthines for the treatment of AECOPD^{3,4}.

Inclusion criteria state that patients who were younger than 80 years were included in the study. There is no clear base for this distinction. Even if there is, the authors did not explain the reason behind it. We have failed to understand why patients who were older than 80 years were not included in the study. This study mainly investigates the time needed for symptom relief, improvement in pulmonary function indexes, and serological indicators, and there are no data on arrhythmias or heart rate. Thus, patients' vital parameters on admission and after both treatments are needed to make a deduction. The difference in the percentage, but not the statistical significance, of adverse reactions between the two groups could be the result of, as authors have stated, a relatively small study group (n=68). However, the difference in adverse reactions might be clinically significant.

However, statistically significant shorter remission times of symptoms, improvement in pulmonary function indexes, and serological indicators show the efficacy of combined treatment, but salbutamol is a standard therapy according to the current guidelines⁴. It might be more proper to compare doxofylline as opposed to salbutamol, which this study has taken as the experimental group.

AUTHORS' CONTRIBUTIONS

OES: Writing-Original Draft. MEC: Writing-Review & Editing.

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Conflicts of interest: the authors declare there is no conflicts of interest. Funding: none. Received on December 13, 2021. Accepted on January 05, 2022.

