Review of: "Risk Factors of Pulmonary Embolism in Patients with Acute Exacerbation of Chronic Obstructive Pulmonary Disease: A retrospective clinical study"

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Potential competing interests: The author(s) declared that no potential competing interests exist.

Dear magazine:

Thank you very much for giving me the opportunity to review this article. The original article is a retrospective study about risk factors associated with pulmonary thromboembolism in acute exacerbation of COPD. It concludes some clinical parameters and risk factors that either help to suffer from it or identify the patient with thromboembolism due to the presence of this symptomatology. The article is very interesting.

I suggest reviewing the following points:

1. **Abstract:**

   **Conclusion:** Patients hospitalized for AECOPD should have multi-slice spiral computed tomography pulmonary angiography (CTPA) to determine whether they present PE complications as soon as possible when combined with chest pain, pulmonary heart disease, prolonged immobility ≥3 days, plasma D-dimer levels higher, and the times of acute exacerbations has increased significantly in the last year.

   I suggest drawing somewhat less blunt conclusions and clearly separating between symptoms associated with PE and risk factors for suffering it. It is a retrospective study. I also suggest eliminating from the conclusions what does not appear in the results.

   The presence of these symptoms: chest pain, pulmonary heart disease, should lead to suspicion of the presence of acute pulmonary thromboembolism. Likewise, prolonged immobility ≥3 days is a risk factor for suffering from it. The analytical parameter plasma D-dimer levels higher, is associated in a statistically significant way with suffering PE in the hospitalized AECOPD patient.

   This part does not appear in the article results. Better remove it from the conclusion: and the times of acute exacerbations have increased significantly in the last year.

1. **Main article:**

   **Introduction:**

   In the last paragraph, the sentence: Therefore, our study is based on the basic information of patients who were admitted
to our hospital because of AECOPD in the past five years, refers more to material and methods than the introduction. The second part of the sentence: to explore the risk factors of AECOPD combined with PE in order to improve clinicians' understanding of PE, enable timely diagnosis of PE and reasonable treatment in AECOPD patients with PE complications AECOPD. It does seem more proper to the objectives that do appear in the introduction.

**Discussion.**

This section must go in results. Preferably at the beginning:

A total of 636 patients were enrolled in this survey, most patients admitted to the hospital for AECOPD were GOLD grade III-IV (510/636). The occurrence of PE in AECOPD patients was 7.40% (47/636), which was lower than the findings of scholars who reported an incidence of 10.3% (54/522)\[9\]. The major reason for this difference may be the differences in the research objects, and because we did not receive PE screening for all patients. In our study, 8 patients without pulmonary embolism died during hospitalization, the mortality rate was 1.36% (8/589), 9 patients with pulmonary embolism died during hospitalization, the mortality rate was 19.15% (9/47), which was significantly higher than that of patients without pulmonary embolism (P ≤0.001).