Reviewer's report

Title: Clinical presentation and predictors of outcome in patients with severe acute exacerbation of chronic obstructive pulmonary disease requiring admission to intensive care unit

Version: 3 Date: 5 November 2006

Reviewer: Angshu Bhowmik

Reviewer's report:

General

I thank the authors for their clarifications about the points I mentioned in my review.

There remain a few outstanding points:

1. Regarding comment 4d in the previous review, the authors have justified the inclusion of patients with past or treated pulmonary tuberculosis in the current study and I accept this argument. However, my query was about the inclusion of current or active pulmonary tuberculosis. This study purports to examine the predictors of outcome of severe AE-COPD. But by including active tuberculosis, the study is confounded as the predictors and features found may turn out to be those of tuberculosis (which is also often a fatal disease). Hence, we cannot be sure if the results are leading us to risk factors for mortality in AE-COPD or risk factors for mortality in tuberculosis. The fact that 5 of the 16 deaths were in patients with active tuberculosis leaves me wondering if the predictors of mortality would change if these patients were excluded from the analysis.

2. Regarding comment 5a, the authors have not actually changed the first paragraph of the discussion as suggested but merely added 2 lines about the background of the study. The remainder of the paragraph largely remains an analysis of bidi smoking rather than a summary of the important findings and relevance of this paper.

3. In paragraph 2 of the discussion, the sentence “When patients present to the ER with severe AE-COPD, and "is in" (should be “and are found to have an”) altered sensorium; in addition to type II respiratory failure and carbon dioxide narcosis, metabolic derangements such as dyselectrolytemia, uremia and hepatic function derangement could also contribute to the altered sensorium.” is poorly constructed and should be revised.

4. Comment 5b: The authors have included the information that all the patients with altered sensorium had dyselectrolytemia. However, dyselectrolytaemia is used for a range of metabolic abnormalities and I am not clear about how the relationship between specific abnormalities and altered sensorium was tested - the details of statistical tests, if any, have not been included. Table 4a still only includes hypoalbuminaemia, elevated transaminases and acidosis as the only predictors of poor outcome.

What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.