Reviewer's report

Title: A case of acute COPD exacerbation complicated by overlap syndrome in which the use of a Respironics V60 Ventilator in average volume-assured pressure support mode was useful in correcting sleep-related hypoventilation: a case report

Version: 2 Date: 16 February 2012

Reviewer: Georgios Kouliatsis

Which of the following following best describes what type of case report this is?: Other

If other, please specify:

Description of applying a novel therapy for a known and well described disease

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is the case report ethical?: Yes

Is there any missing information that you think must be added before publication?: Yes

Is this case worth reporting?: Yes

Is the case report persuasive?: Yes

Does the case report have explanatory value?: Yes

Does the case report have diagnostic value?: No

Will the case report make a difference to clinical practice?: Yes

Is the anonymity of the patient protected?: Yes

Comments to authors:

The efficacy and safety of Average Volume-Assured Pressure Support (AVAPS) for the treatment of COPD exacerbations has not been thoroughly tested and a case report describing the successful application of this novel therapy in a patient with severe COPD exacerbation seems worth publishing. In my opinion, the authors put too much emphasis on the comparison of the two ventilation modes. The two models cannot be compared in terms of mean tidal volume
when applied in two different episodes of COPD exacerbation. The comparison would seem justified if the application of NIPPV mode and AVAPS were used for the same clinical scenario and specifically if AVAPS was applied after a NIPPV trial. The authors might also want to comment on the fact that the target volume in AVAPS settings were well below the mean tidal volume during sleep with NIPPV

Quality of written English: Acceptable