Reviewer’s report

Title: Haemodynamics and oxygenation improvement induced by High Frequency Percussive Ventilation in a hypoxic cardiac surgery patient.

Version: 2 Date: 22 March 2010

Reviewer: Umberto Lucangelo

Which of the following following best describes what type of case report this is?: None

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?: No

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:

Forti et al present a case report regarding HFPV in hypoxic cardiac surgery patients. Although the case report is potentially interesting, some important shortcomings are present:

1) The author should specified the preoperative gas exchange and hemodynamic values.
2) It's not clear if the patient has been mechanically ventilated for ten days continuously and which respiratory mechanics adjustments has been made during this period.
3) The authors reported any significative increase in respiratory parameters after IPRV modality of conventional ventilation. How the authors define a patient responder to ventilatory treatment?
4) The fast response to 12 hour of HFPV and the subsequent extubation after 10 hours of conventional mechanical ventilation allow two considerations: a) the patient was undertreated during the first ten days b) the clinical status has been abruptly improved for a consequence change in pharmacological therapy (antibiotics, steroids, etc..) not mentioned in the manuscript. Authors should be comment this point.

5) Figure 1 and 2 are redundant and should be taked off from the work. For the interested reader, the figures are available on the Percussionaire Corp. website.

6) Author should be explain the rationale of the starting setting of HFPV that use a I:E of 1:7. It was used oscillatory CPAP during a so long expiration phase? Please specified.

7) It will be very useful for the reader a deep physiopathological comment concerning the results.

**Quality of written English:** Not suitable for publication unless extensively edited