Reviewer’s report

Title: Randomised controlled trial of weaning strategies for preterm infants on nasal continuous positive airway pressure

Version: 0 Date: 28 Aug 2015

Reviewer: Camilla Gizzi

Reviewer's report:

This is an interesting, original and well written paper about strategies to wean preterm infants from NCPAP. HFNC offers a respiratory support that is similar to NCPAP, however using HFNC patient's comfort is higher as well as parents' satisfaction. While weaning from non invasive ventilation, is of utmost importance to alleviate preterm infant's respiratory fatigue until breathing autonomy is fully reached, whichever strategy is used. In this study, a quite high withdrawn rate of infants in Group 2 may interfere with a correct interpretation of results while using an abrupt discontinuation of NCPAP without HFNC to wean infants from non invasive ventilation.

My comments to Authors are:

Study population and study design: page 4, line 8: do you usually manage to keep infant's mouth closed while on NCPAP in your Unit? If yes, please describe how. This could be of readers' interest.

Intervention: page 4, line 56: "This was standard practice at RPA" is referred to method used in Group 4?

Study Devices: page 5, line 46: please specify which flow rates were used for NCPAP

Results: It is no clear to me how withdrawn infants were considered for the statistical analysis regarding primary and secondary outcomes. Please specify.

Discussion: page 8, line 32. Is "the" incorrect?

Table 1: please specify definition of grade 2 apnoea and grades of IVH

Table 2: see my comments on results session

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

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