

Unsynchronized Nasal Intermittent Positive Pressure Ventilation vs. Head Box Oxygen for Preventing Extubation Failure

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Sir,

I read the article by Kumar et al. with great interest [1]. However, I would like to point out few issues.

First, though the authors have not compared unsynchronized Nasal Intermittent Positive Pressure Ventilation (NIPPV) with the CPAP due to the non-availability of CPAP prongs, ideally unsynchronized NIPPV should also have been given with CPAP nasal prongs rather than the cut endotracheal tube, as short binasal prongs are the best interface available till date [2]. Putting neonates on head box oxygen with the available evidence of CPAP in preventing extubation failure is not justified. Putting neonates on indigenous or bubble CPAP instead of ventilator CPAP or head box oxygen after extubation will be more cost effective intervention in resource poor settings like ours. On one hand this will make the ventilator available for the neonates requiring invasive ventilation and on other hand, it will decrease the extubation failure rate as compared to head box oxygen.

Second, nothing has been commented upon the blinding which is an important component of any RCT. Though the intervention can't be blinded in this case but there is no information whether the persons collecting and analyzing the data were blinded or not to the intervention.

Third, the assumption of 45% as the baseline extubation failure rate on head box oxygen for calculating the sample size has not been elaborated by the authors.

Fourth, agitation was found to be more in NIPPV group. It would have been good to use some pain scoring system like N-PASS which is a more objective way of assessment rather than just labeling as "agitation" [3]. Agitation per se is subjective in nature and prone for bias.

Fifth, the rationale of doing blood gases at least every 12 h in the first 24 h post extubation, then every 24 h for 48 h in all cases in absence of any clinical signs of deterioration is not clear. Despite these limitations, I appreciate the authors for their work.

References

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