Noninvasive ventilation in acute respiratory distress syndrome: A long way ahead

Sir,

We thank Rao et al. for their observation on our study[1] regarding the use of noninvasive ventilation (NIV) in mild-to-moderate acute respiratory distress syndrome (ARDS).[2] The response from Rao and Munta presents a very gloomy picture for the role of NIV in ARDS, which is not true.[3] The judicious use of NIV has been shown to prevent endotracheal intubation in 52% of the cases of ARDS.[3] The mortality rate in studies involving the use of NIV in ARDS is variable, depending on the patient profile.[3] While it was 32% in the study (Thille et al.)[4] quoted by Rao et al., it has been reported to be as high as 71%.[5] The authors have raised a concern regarding a delay in intubation being the primary reason for high mortality. They further suggest that earlier intubation could have avoided the deaths in our study.[1] The median (interquartile range) time to intubation was 3 (1–4) h in our study that is far earlier than that reported in an international multicenter study on the use of NIV in ARDS.[6] Further, without a control group of invasive ventilation, one cannot conclude from our study that the use of NIV or delay in intubation led to an increase in mortality. In addition, Rao et al. quote a retrospective study (a study design fraught with many limitations) describing the use of NIV in ARDS following esophagectomy (postsurgical patients),[7] the patient profile being entirely different from that of our study (predominantly sepsis). Interestingly, Rao et al. claim an astonishingly low mortality rate of ARDS in their Intensive Care Unit (ICU) using pressure control ventilation (a strategy yet to establish its role in ARDS).[2] Only two strategies have shown a reduction in mortality in patients with ARDS, namely the low tidal volume strategy using volume control ventilation and prone ventilation.[8,9] The mortality even at best centers has been reported to be around 32%.[9] Further, the reference by the authors where they suggest a low mortality in their ICU seems to be a review article and not an original article subjected to the rigors of a thorough peer review.[10] It would be interesting to see if Rao et al. could replicate their observation in an original article.

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Conflicts of interest

There are no conflicts of interest.

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References


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