

The role of noninvasive ventilation in mild to moderate acute respiratory distress syndrome

Sir,

We read with great interest the research article, "A study on the role of NIV in mild to moderate acute respiratory distress syndrome," published in the previous issue.^[1] It was alarming to note that only 44% had successful noninvasive ventilation (NIV) use while the rest of the patients had to be intubated. The mortality quoted for NIV failure group was 46.3% (19 out of 23), which is rather high in the present scenario.

The mortality of moderate adult respiratory distress syndrome (ARDS) in a study done by Thille *et al.* was only 32%.^[2] The author suggests high APACHE scores and delay in intubations as the reasons of the high mortality. The mortality rate is unacceptable and could have been reduced if they were not subjected to further trial of NIV

after 1 h. A retrospective study of NIV role in moderate ARDS in esophagectomy patients concluded that it would be an effective option to consider invasive mechanical ventilation in those with P/F ratio <180 after 2 h of NIV.^[3] NIV success rates with no significant difference of APACHE score groups was 48.4 in the same study.^[3] NIV stands as the first-line approach and may be attempted in ARDS patients with P/F ratio >150.^[2] Patients who have P/F ratio of <200 with lung injury score scores >1.5 have to be taken into consideration to go for invasive ventilation.^[4]

We manage large number of ARDS patients in our department. ARDS patients (P/F ratio >150) can be treated with NIV while moderate to severe ARDS (P/F ratio <150) should be managed with pressure-controlled mechanical ventilation. Our mortality rates have been 11.4% in the past 3 years.^[4]

NIV for ARDS has to be chosen cautiously and needs vigilant monitoring as it can lead to high mortality, even when one makes a decision to shift from NIV to invasive ventilation quickly.

I entirely agree with editorial remarks that the acute inflammation of lung can spread very quickly making the recruitment process slow and delayed. One has to be extremely careful when you choose NIV for ARDS.

Acknowledgments

We gratefully acknowledge management of the hospital for their valuable support.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

Manimala S. Rao, Kartik Munta

Department of Critical Care Medicine, Yashoda Multi-speciality Hospital, Somajiguda, Hyderabad, Telangana, India

Correspondence:

Dr. Manimala S. Rao,
Department of Critical Care Medicine, Yashoda Multi-speciality Hospital,
Somajiguda, Hyderabad - 500 082, Telangana, India.
E-mail: manimalarao@hotmail.com

References

- Singh Sehgal I, Chaudhuri S, Dhooria S, Agarwal R, Chaudhry D. A study on the role of noninvasive ventilation in mild-to-moderate acute respiratory distress syndrome. *Indian J Crit Care Med* 2015;19:571-627.
- Thille AW, Contou D, Fragnoli C, Córdoba-Izquierdo A, Boissier F, Buisson CB. Non-invasive ventilation for acute hypoxemic respiratory failure: Intubation rate and risk factors. *Crit Care* 2013;17:269.
- Yu KY, Zhao L, Chen Z, Yang M. Noninvasive positive pressure ventilation for the treatment of acute respiratory distress syndrome following esophagectomy for esophageal cancer: A clinical comparative study. *J Thorac Dis* 2013;5:777-82.
- Rao M, Munta K. Acute respiratory distress syndrome- past, present and future. *Curr Respir Med Rev* 2015;11:231-5.

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

Access this article online	
Quick Response Code: 	Website: www.ijccm.org
	DOI: 10.4103/0972-5229.171419

How to cite this article: Rao MS, Munta K. The role of noninvasive ventilation in mild to moderate acute respiratory distress syndrome. *Indian J Crit Care Med* 2015;19:751-2.