



# REVISTA BRASILEIRA DE ANESTESIOLOGIA

Publicação Oficial da Sociedade Brasileira de Anestesiologia  
www.sba.com.br



## LETTERS TO THE EDITOR

### Timing of percutaneous tracheotomies in intensive care unit



### Momento propício para traqueostomia percutânea em unidade de terapia intensiva

Dear Editor,

We read with great interest the article of Duran et al.<sup>1</sup> concerning timing of percutaneous tracheotomies in adult intensive care unit. We congratulate them on the presentation of the article. However, we would like to add some comments.

Tracheotomy is a common procedure for patients who require prolonged ventilation. It may be beneficial by lowering airway resistance, improving oral hygiene, and improving pulmonary toilet and airway security and may also be associated with less sedative administration, less time of sedation, enhanced patient comfort, and fewer pulmonary infections.<sup>2</sup>

We agree with author about that early percutaneous tracheotomies shorten mechanical ventilation time, ICU and hospital stay times and result in less damage to the airways. Studies showed the efficiency of early tracheotomy on mechanical ventilation time, ICU stay times and preventing the airway damage in critically ill patients. However, the optimal timing (early vs. late) of the tracheotomy in critically ill patients requiring prolonged MV remains unclear.<sup>3</sup>

The National Association of Medical Directors of Respiratory Care recommended that tracheotomy should replace endotracheal intubation in patients who still require mechanical ventilation 3 weeks after admission; and noted that identification of the optimal time for a tracheotomy to be performed is one of the most important criteria when deciding to perform the procedure.<sup>4</sup>

Analyses of some study groups showed that the rates and timing of tracheotomy varied significantly across ICUs.<sup>5</sup> A preconceived opinion of efficacy (in the absence of any evidence to support an optimal time for a tracheotomy) has been argued for explaining this incompatibility between the widespread use of tracheotomy and its incoherent and non-homogenous clinical use.<sup>6</sup> This may be of particular clinical importance because patients receiving a tracheotomy require a large amount of care resources after the procedure.

We observe noticeable heterogeneity in this study. This heterogeneity could be associated by different number of patient and illness in two groups. We think that patient condition and severity of illness may affect tracheotomy timing and outcomes. Thus groups formed should be more homogenous.

### Conflicts of interest

The authors declare no conflicts of interest.

### References

1. Duran M, Abdullayev R, Çömlekçi M, et al. Comparison of early and late percutaneous tracheotomies in adult intensive care unit. *Rev Bras Anesthesiol.* 2014;64:438–42.
2. Trouillet J, Luyt C, Guiguet M, et al. Early percutaneous tracheotomy versus prolonged intubation of mechanically ventilated patients after cardiac surgery. *Ann Intern Med.* 2011;154:373–83.
3. Wang F, Wu Y, Bo L, et al. The timing of tracheotomy in critically ill patients undergoing mechanical ventilation. *Chest.* 2011;140:1456–65.
4. Terragni PP, Antonelli M, Fumagalli R, et al. Early vs late tracheotomy for prevention of pneumonia in mechanically ventilated adult I.C.U. patients. *JAMA.* 2010;303:1483–9.
5. Nathens AB, Rivara FP, Mack CD, et al. Variations in rates of tracheostomy in the critically ill trauma patient. *Crit Care Med.* 2006;34:2919–24.
6. Heffner JE. The role of tracheotomy in weaning. *Chest.* 2001;120:477–81.

Sukru Tekindur<sup>a</sup>, Memduh Yetim<sup>b,\*</sup>

<sup>a</sup> *Gulhane Military Medical Academy (GMMA), Department of Anesthesiology and Reanimation, Ankara, Turkey*

<sup>b</sup> *Van Military Hospital, Van, Turkey*

\*Corresponding author.

E-mail: [memduhyetim@yahoo.com](mailto:memduhyetim@yahoo.com) (M. Yetim).

Available online 10 February 2016

<http://dx.doi.org/10.1016/j.bjane.2015.02.009>  
0104-0014/

© 2015 Sociedade Brasileira de Anestesiologia. Published by Elsevier Editora Ltda. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).