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## LETTER TO THE EDITOR

### Lung isolation for emergent thoracotomy in the bleeding airway patient: the choice of bronchial blocker may make a difference



### Isolamento pulmonar para toracotomia de emergência em paciente com sangramento de vias aéreas: a escolha do bloqueador brônquico pode fazer diferença

Dear Editor,

Several points might merit clarification in the recent case report by Almeida et al.<sup>1</sup> that outlined the use of a bronchial blocker for lung isolation in a patient needing emergency right-sided thoracotomy who had a difficult airway due to orofacial bleeding. It is mentioned that an exchange of the endotracheal tube (ETT) was undertaken with the use of an “exchanger stylet” in this already intubated patient who was coming from the intensive care unit. However, the benefit of using the bronchial blocker they chose (Rusch<sup>®</sup> EZ-Blocker<sup>™</sup>; Teleflex, Morrisville, NC, USA) is that it can be placed in an already indwelling single lumen ETT<sup>2</sup> so it is unclear why an ETT exchange was needed. Another advantage of bronchial blocker use is that it may also result in more rapid lung deflation compared to a double lumen ETT.<sup>3</sup>

However, although the authors accurately point out the advantages of using bronchial blockers in this difficult airway situation, the type of bronchial blocker used may be influential on the overall time it takes to optimally isolate the lung. For example, it has been previously shown that with the use of an Arndt endobronchial blocker (Cook Medical; Bloomington, IN, USA), particularly for right-sided placement as was done in this present case, that it can be done as rapidly as with a double-lumen ETT.<sup>4</sup> This is likely because this type of

bronchial blocker (even if initially placed “blindly”) invariably enters the right bronchus. Thus for an urgent right thoracotomy such as for the hemothorax in this case, the use of the Arndt blocker may have had an advantage of a higher first-pass success. Indeed, the EZ-Blocker option requires more nuanced placement and can easily be malpositioned with both sides of the blocker entering either the left or the right bronchus and this may have accounted for the longer time to properly obtain lung isolation, as was noted by the authors.

### Conflicts of interest

The author declares no conflicts of interest.

### References

1. Almeida C, Freitas MJ, Brandao D, et al. Use of bronchial blocker in emergent thoracotomy in presence of upper airway hemorrhage, and cervical spine fracture: a difficult decision. *Rev Bras Anesthesiol.* 2018;68:408–11.
2. Grocott HP, Scales G, Schinderle D, et al. A new technique for lung isolation in acute thoracic trauma. *J Trauma.* 2000;49:940–2.
3. Bussieres JS, Somma J, Del Castillo JL, et al. Bronchial blocker versus left double-lumen endotracheal tube in video-assisted thoracoscopic surgery: a randomized-controlled trial examining time and quality of lung deflation. *Can J Anaesth.* 2016;63:818–27.
4. Grocott HP, Darrow TR, Whiteheart DL, et al. Lung isolation during port-access cardiac surgery: double-lumen endotracheal tube versus single-lumen endotracheal tube with a bronchial blocker. *J Cardiothorac Vasc Anesth.* 2003;17:725–7.

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