## CORRESPONDENCE





## Apneic oxygenation during emergency airway management

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## To the Editor,

Tan et al. performed a systematic review and metaanalysis to evaluate the effectiveness of apneic oxygenation (AO) in preventing oxygen desaturation during emergency intubations. The authors are to be applauded for trying to get the facts out of all the available, and sometimes conflicting, literature. I would like, however, to highlight two important points related to AO. Although the authors concluded, in agreement with most studies, that AO prolongs the duration of safe apnea, the technique should not be considered an alternative to proper pre-oxygenation. Pre-oxygenation, regardless of how it is performed, is an essential first step before any emergency airway intervention. Omitting pre-oxygenation and totally relying on AO to prevent desaturation during intubation may result serious in life-threatening complications if a difficult intubation is encountered.<sup>2</sup> Second, the authors limited their meta-analysis to AO through the nasal route. The oral (or buccal) route has also been described and can prolong the safe apnea duration with even lower flow rates than those used with the nasal route.<sup>3</sup> Either an oropharyngeal catheter or an adapted RAE tube can be secured on the left buccal space. Nasally administered oxygen may not reach the lungs if the airway is obstructed by the soft palate, a redundant upper pharyngeal wall as in sleep apnea patients, or the tongue, whereas using the oral route will ensure delivering the oxygen to the low pharyngeal supraglottic space. Finally, as the authors stated in their review, further clinical trials are required to firmly establish the effectiveness and optimize the technique of oxygen supplementation during emergency airway management.

Conflicts of interest None declared.

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This letter is accompanied by a reply. Please see Can J Anesth 2019; 66: this issue.

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