



# Lidocaine during intubation and extubation in patients with coronavirus disease (COVID-19)

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Received: 9 March 2020 / Revised: 10 March 2020 / Accepted: 10 March 2020 / Published online: 16 March 2020  
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## To the Editor,

In the months that have followed the initial outbreak of severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) in Wuhan, a similar critical situation has developed in Iran. Anesthesiologists are at the forefront of this fight, particularly at the time of airway management. We have implemented into our daily practice the valuable points from the recently published review article by Wax and Christian “Practical recommendations for critical care and anesthesiology teams caring for novel coronavirus (2019-nCoV) patients”.<sup>1</sup> We would like to add two additional points to the others raised in their review.

Cough is one of the major ways of human-to-human viral spread, and is one of the prevalent features of this infectious disease<sup>2</sup>; any airway instrumentation can also exacerbate it. Cough is a common event following premedication with an opioid such as fentanyl (given prior to induction of anesthesia) and can be prevented by a single intravenous dose of lidocaine.<sup>3</sup> One of the reasons complete muscle relaxation during endotracheal intubation in coronavirus disease (COVID-19) patients is recommended is to reduce coughing.<sup>4</sup> In addition, coughing and bucking are also

prevalent events during extubation. Emergence coughing is a challenging issue and a variety of medications have been proposed to prevent it. Again, administration of intravenous lidocaine (which is readily available) prior to tracheal extubation can effectively reduce emergence coughing without any other significant side-effects.<sup>5</sup> Consideration should be given to injections of lidocaine at the beginning and the end of any procedure requiring intubation and/or extubation in patients with COVID-19.

**Conflicts of interest** None

**Funding statement** None.

**Editorial responsibility** This submission was handled by Dr. Hilary P. Grocott, Editor-in-Chief, *Canadian Journal of Anesthesia*.

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