Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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LETTER TO THE EDITOR

Letter to the Editor: Additional Recommendations before Intubation of COVID-19 Patients

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EVER since the first patient was diagnosed with coronovirus disease 2019 (COVID-19), many epidemiologic reports tried to present signs and symptoms of patients infected with SARS-CoV-2 (Severe acute respiratory syndrome coronavirus 2). For instance, in a review article published by Jiang *et al*., respiratory symptoms including cough and dyspnea, are the common initial findings in such patients after fever. [1] This Very contagious disease involves lower respiratory system and can lead to coronavirus pneumonia and rapidly progressive acute respiratory distress syndrome (ARDS),[2] and if the respiratory failure occurs, patients need intubation and protective mechanical ventilation. [3]

We really appreciate Zuo *et al.* for presenting article titled "*Expert Recommendations for Tracheal Intubation in Critically ill Patients with Novel Coronavirus Disease 2019*", which has greatly helped all anesthesiologists and assistants to provide better care for patients infected with COVID-19 virus.[4] But according to our observations and available evidence, we want to add some recommendations to valuable information of this article. Based on recommendation of this article, anesthesiologists can use injection of lidocaine through the working throat channels before intubation and lidocaine spray as a topical anesthesia in awake patients, but as we know, this type of administrating lidocaine can cause further irritation of airway and tracheal spasm. In addition, spraying lidocaine produces more aerosols and as a general result, chance of infecting medical staff increases.

Therefore, as a resolve of this problem and preventing cough in patients infected with COVID-19, we propose injecting intravenous lidocaine or dexmedetomidine before administrating tracheal intubation. The systematic review and meta-analysis articles published by Clivio *et al*. and Tung *et al.* confirmed our statement, because they declared that intravenous lidocaine dose dependently prevents intubation, extubation, and opioid-induced cough in adults, and the suggested dose by the authors for achieving this goal was 0.5-2.0 mg/kg intravenously.[5] In addition, dexmedetomidine is regarded as the most effective drug to prevent coughing.[6]

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We also have other additional recommendations before performing intubation of patients with COVID-19 that paying attention to them seems necessary.

1) Patient's level of consciousness before intubation, because if extreme elevation of PCO_2 has occurred, intubation can lead to a decrease in patient's consciousness.

2) Not applying pulse oximeter probe on cold limbs.

3) Applying pulse oximeter probe on auricle can provide the most accuracy.

Conflicts of interests

None.

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