## Letter to the Editor

## In Response to Association of Severe Tongue Edema With Prone Positioning in Patients Intubated for COVID-19

In Reply:

We would like to thank Dr Onal and Dr Onal for their interest in our article and discussion regarding the topic of tongue edema.  $^{1,2}$ 

We acknowledge that prior studies, including their own, have examined tongue edema in other settings. Dr Onals's work on tongue edema in pediatric patients undergoing tonsillectomy and in adult patients undergoing suspension laryngoscopy illustrates that tongue edema can develop in a variety of patient populations.<sup>3,4</sup> However, we would like to clarify that when we stated that our study was the first in the literature to describe this clinical entity, we were specifically referring to severe tongue edema that develops in patients with COVID-19 who are intubated, not to tongue edema in general. To our knowledge, our study was the first to examine factors contributing to the development of severe tongue edema in this specific population. Clinically, we had observed this phenomenon occurring in greater frequency and severity than previously seen in critical care patients without COVID-19.

We would also like to thank Dr Onal and their group for differentiating between "submassive" and "massive" tongue edema. The entity we classified as "severe" correlates with their description of "massive" tongue edema. We acknowledge that given the retrospective nature of our study, clinical descriptors of the degree of tongue edema were often variable. However, all patients had clinically significant tongue edema that was visible to the naked eye. As mentioned in our study, the edema in our patient population often led to protrusion of the tongue beyond the teeth or even beyond the confines of the oral vestibule.

Identifying submassive tongue edema in this cohort was not the focus of our study. However, future research may benefit from tools such as the submental ultrasound described by Dr Onal to objectively measure the degree of tongue edema in this population. $^5$ 

We agree on other points mentioned and acknowledge that the development of tongue edema is likely multifactorial as stated in our study. By highlighting the potential role of prone positioning in its incidence among patients intubated for COVID-19 associated respiratory failure, we hope to facilitate screening and prevention measures. Early diagnosis and intervention are important in ensuring optimal outcomes and preventing adverse complications.

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The authors have no funding, financial relationships, or conflicts of interest to disclose.

Presented at the COSM Virtual Meeting, April 7-11, 2021, as a poster.

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DOI: 10.1002/lary.29950