



Letter

Covid-19 and perioperative mortality; where do we stand?

Behnam Shakiba^{a,*}, Shirin Irani^b^a Urology Department, Firoozgar Hospital, Iran University of Medical Sciences, Valadi St. Valiasr Ave., Tehran, Iran^b Otorhinolaryngology Research Center, Amir Alam Hospital, Tehran University of Medical Sciences, Tehran, Iran

ARTICLE INFO

Article History:

Received 13 April 2020

Accepted 21 April 2020

Available online 27 April 2020

In the age of Covid-19, surgeons are facing some challenges when deciding to perform or postpone elective operations. Therefore, we read with great interest the paper by Lei and colleagues [1]. They reported the overall hospital mortality following selective surgeries during the incubation period of COVID-19 as 20.5%.

We would like to make a few minor criticisms on this study. First, the researchers, as anesthesiologists, did not mention the American Society of Anesthesiologists (ASA) physical status of their studied patients. Kumar et al. [2] demonstrated a significant trend toward higher perioperative mortality in ICU with an increase in the ASA physical status. Previous studies have shown a mortality rate of 0–0.3% for ASA I, 0.3–1.4% for ASA II, 1.8–4.5% for ASA III and 7.8–25.9% for ASA IV cases [3]. ASA classification is certainly a useful tool for predicting the patients' outcome [4]. In Lei et al. study, all nonsurvivors had at least one comorbidity whereas 57.1% of them suffered from different malignancies. Therefore, the high ASA status and poor general condition of these patients may have largely contributed in the high mortality rate. Secondly, Lei and colleagues have compared their study findings with that of Kumar et al. study [2] and

stated that postoperative mortality rate in COVID-19 patients is higher than the fatality rate in non-cardiac surgical patients without COVID-19 infection. We believe that in addition to the small sample size, this comparison is not quite accurate regarding the different surgical risks, different blood loss volumes and the mean age in the mentioned studies.

It seems that throughout the Covid-19 pandemic days, performing elective surgeries may have certain risks for both patients and the healthcare professionals, but the findings of Lei et al. study about the higher mortality rate needs to be interpreted with further caution.

Declaration of competing interest

None

References

- [1] Lei S, Jiang F, Su W. Clinical characteristics and outcomes of patients undergoing surgeries during the incubation period of COVID-19 infection. *E Clin Med* 2020;100331.
- [2] Kumar P, Renuka MK, Kalaiselvan MS, Arunkumar AS. Outcome of noncardiac surgical patients admitted to a multidisciplinary intensive care unit. *Indian J Crit Care Med* 2017;21(1):17–22.
- [3] Daabiss M. American Society of Anaesthesiologists physical status classification. *Indian J Anaesth* 2011;55:111–5.
- [4] Abelha F, Maia P, Landeiro N, Neves A, Barros H. Determinants of outcome in patients admitted to a surgical Intensive Care Unit. *Arq Med* 2007;21:135–43.

DOI of original article: <http://dx.doi.org/10.1016/j.eclinm.2020.100331>.

* Corresponding author.

E-mail address: shakiba.b@iums.ac.ir (B. Shakiba).<https://doi.org/10.1016/j.eclinm.2020.100364>2589–5370/© 2020 The Author(s). Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license. (<http://creativecommons.org/licenses/by-nc-nd/4.0/>)