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LETTER TO THE EDITOR

Supplemental oxygen in surgical patients with COVID-19

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To the Editor:

We read with great interest the article from Hotta [1]; however, we want to add the following:

In upper limb surgical procedures, when regional anesthesia is administered, the entire surgical team remain in close proximity to the patient's face, with the risk of exposure to atomization of particles < 5 µm produced by coughing, sneezing, breathing and speaking, as well as greater dispersion of exhaled air by administration of supplemental oxygen. Also, some particles are small enough to stay in the air for hours, particularly in operating rooms where negative pressure is not available. Similar to that suggested by Mendes et al. [2], we consider that the use of N95 respirators (instead of surgical masks) can be very useful to limit particles spread. The question is, should the N95 respirator be placed on or under the oxygen mask?

Binks et al. [3] proposed placing the surgical mask directly on the patient's nose and mouth and on top of the Hudson-type mask. So, we measured and compared (Wilcoxon Rank-Sum Test) (Supplementary Figure 1 and Table 1) FiO_2 and $ETCO_2$ at three different times, using a carbon dioxide sample line in two situations: First, breathing oxygen at 3 L min^{-1} through a Hudson-type mask with a non-rebreathing reservoir placed on, and second, under an N95 respirator; without finding differences. We believe that the use of N95 respirators under the oxygen masks, should be considered.

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Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

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