



# Author's Reply: Hazardous Postoperative Outcomes of Unexpected COVID-19 Infected Patients: A Call for Global Consideration of Sampling All Asymptomatic Patients Before Surgical Treatment

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We thank Gangakhadkar et al. for their constructive comment on our review and appreciate the opportunity to further discuss the consideration of sampling preoperative patients for coronavirus disease 2019 (COVID-19) prior to any surgical treatment.

In our published review, we presented the possible hazardous implications of an asymptomatic undetected COVID-19 infection in surgical patients, suggesting a recommendation for a global consideration of sampling all patients before surgical treatment.

We agree with Gangakhadkar et al. that regardless of the RT-PCR result for COVID-19, during the current pandemic special attention should be taken in matter of personal protective measures, emphasizing the importance of patients' and medical staff safety. Diagnosing potential asymptomatic patients may reduce postoperative unexpected complications as well as in-hospital transmission.

As the question of preoperative diagnosis of COVID-19 occupied many physicians and medical authorities, we believed that our published rapid analysis was of great importance. By the time of our literature search, only four reports were published on the topic. As so, we hoped our review would inspire more research on the perioperative course of asymptomatic undiagnosed surgical patients. Accordingly, the largest recent study published analyzed 1128 patients who had an operation during the current pandemic, with COVID-19 infection diagnosed within 7 days before or 30 days after surgery [1]. In line with our results, the mentioned study presented pulmonary complication rate of 51.2% and a 30-day mortality rate of 23.8%.

Importantly, higher mortality rates were documented in COVID-19 surgical patients diagnosed postoperatively.

As the current pandemic progresses, the laboratory diagnosis of COVID-19 has been improving, in accuracy and in the time interval for receiving results. RT-PCR kits are continuously updated, presenting a better sensitivity, and serological testing has been shown to have higher accuracy. A combination of the two methods may also be suggested for preoperative assessment aiming to reduce morbidity [2]. Moreover, rapid detection tests have been successfully developed [3], and additional progress is to be expected, enabling the option of accurate routine rapid preoperative screening.

Despite the relative inaccuracy in diagnosis of COVID-19, minimizing the risks of complications, morbidity, and mortality should be our main goal. As many surgeons across the world are now returning to perform elective surgery, many potential asymptomatic COVID-19 carriers may undergo surgical procedures and a possible fatal morbidity may be noticed during these surgical activities.

In view of the progress in diagnostic tests and the presented perilous outcomes of infected COVID-19 surgical patients, routine preoperative screening should be considered, focusing on patient and staff safety.

## References

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