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## Surgery during the COVID-19 pandemic

The COVIDSurg Collaborative's study<sup>1</sup> of surgical outcomes in patients with COVID-19 is commendable, as most existing publications around perioperative practice are commentaries or recommendations with extrapolated knowledge.

The study findings<sup>1</sup> suggest a grievous prognosis for patients having surgery during the COVID-19 pandemic, in that nearly one in four (23.8% [268 of 1128]) patients die within 30 days, and about half (51.2% [577]) of them will have major pulmonary complications. Factors associated with these outcomes were non-modifiable, except for the decision of elective surgery. Even among elective surgeries, delaying cancer surgery might have its own consequences. Hence, it becomes crucial to look for modifiable risk factors, such as the anaesthetic type.

Although unproven in people with COVID-19, preference for regional anaesthetic over general anaesthesia has advantages such as minimal effect on the respiratory system, avoidance of intubation-related seeding of pathogens to the lower respiratory tract, decreasing thromboembolic complications, and a reduced surgical stress response.<sup>2,3</sup> Using regional anaesthetic techniques, aerosol-generating procedures can be avoided with decreased risk to health personnel; additionally, there is potential to conserve protective equipment and essential drugs during shortages.<sup>4</sup>

In our crude analysis of the COVIDSurg Collaborative data, we found that regional anaesthetic was associated with a potentially favourable odds ratio for 30-day mortality (1.23) and pulmonary complications (1.23). However, both include the null effect within their 95% CI. The choice of anaesthetic is determined by the surgical procedure, patient parameters, and a shared

decision between the patient and the physician. We urge the COVIDSurg Collaborative to consider these analyses and provide effect estimates to allow for a more informed discussion and decision making about the type of anaesthetic for patients with COVID-19.

We declare no competing interests.

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