Practical considerations for performing regional anesthesia: lessons learned from the COVID-19 pandemic

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Coronavirus disease (COVID-19) was declared a pandemic by the World Health Organization on 11 March 2020 because of its rapid worldwide spread. In the operating room, as part of hospital outbreak response measures, anesthesiologists are required to have heightened precautions and tailor anesthetic practices to individual patients. In particular, by minimizing the many aerosol-generating procedures performed during general anesthesia, anesthesiologists can reduce exposure to patients' respiratory secretions and the risk of perioperative viral transmission to healthcare workers and other patients. To avoid any airway manipulation, regional anesthesia should be considered whenever surgery is planned for a suspect or confirmed COVID-19 patient or any patient who poses an infection risk. Regional anesthesia has benefits of preservation of respiratory function, avoidance of aerosolization and hence viral transmission. This article explores the practical considerations and recommended measures for performing regional anesthesia in this group of patients, focusing on control measures geared towards ensuring patient and staff safety, equipment protection, and infection prevention. By doing so, we hope to address an issue that may have downstream implications in the way we practice infection control in anesthesia, with particular relevance to this new era of emerging infectious diseases and novel pathogens. The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is not the first, and certainly will not be the last novel virus that will lead to worldwide outbreaks. Having a well thought out regional anesthesia plan to manage these patients in this new normal will ensure the best possible outcome for both the patient and the perioperative management team.