COVID-19: The Unseen Threat for the Healthcare Professionals

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The COVID-19 pandemic has posed significant challenges for healthcare professionals (HCPs) due to its rapidly evolving nature, lack of specific treatment or vaccine, need for knowledge update, and innovative strategies for HCPs to respond to a hitherto unknown entity in their clinical practice.

Apart from physical distancing, respiratory etiquette and hand hygiene, use of personal protective equipment (PPE) is essential to prevent transmission of this highly contagious infection to HCPs. Anesthesiologists, by virtue of their role in highly critical areas of hospitals such as emergency departments (EDs), operation theaters (OTs) and intensive care units (ICUs), are at the forefront in the fight against COVID-19. Unlike their colleagues, anesthesiologists are more vulnerable to acquiring COVID-19, as they are at risk of prolonged exposure to infectious patients with high-viral load during aerosol generating procedures (AGPs) such as bag-mask ventilation, high-flow oxygen therapy, noninvasive and invasive ventilation, tracheal intubation and extubation, tracheostomy, T-piece weaning, suctioning of airway secretions, nebulization, bronchoalveolar lavage, chest physiotherapy, and cardiopulmonary resuscitation.

Working with PPE in OT and ICUs presents unique challenges in patient care such as difficulty in respiratory and cardiac auscultation, communication with the patient, their family and other HCPs, and swift movement between different work areas. Also, there is a need to confront new challenges of physical discomfort such as sweating, breathing difficulty, decreased visibility from fogging of goggles, long work hours without access to food, water or restroom, and psychological issues such as anxiety and stress.

In this issue, authors from an academic hospital have shared their protocol for anesthetic management of COVID-19 patients for neurosurgery. They have comprehensively discussed the strategies to be adopted by neuroanesthesiologists in the current circumstances. Given the dynamic nature of the disease, new evidence is rapidly emerging to guide the anesthetic management of surgical patients during the pandemic. The Indian Society of Anaesthesiologists has come out with an advisory with regard to the setting up of COVID-19 OTs, including number and location, entry and exit, donning and doffing, air conditioning, personnel and equipment, PPEs, sterilization and decontamination of OTs, and standard operating procedures for conduct of anesthesia for these patients. The Society for Neuroscience in Anesthesiology and Critical Care (SNACC) recently published recommendations for neuroanesthesia practice during the COVID-19 pandemic. This consensus-based guidance by experts discusses several implications specific to neuroanesthesiologists, such as neurologic manifestations of COVID-19, anesthetic considerations for specific neurosurgical procedures, and physical and mental wellness of anesthesiologists, given the prolonged patient contact during the long neurosurgical procedures and use of general anesthesia, unlike non-neurological procedures where regional anesthesia minimizes AGPs. This week, the Neurological Society of India has released a consensus statement for neurosurgery and neurology practices during the COVID-19 pandemic. It provides guidance on timing of surgeries, management of neurological and neurosurgical COVID-19-positive, COVID-19-suspected and COVID-19-negative patients, material and human resource utilization, and protection of HCPs. The American Society of Anesthesiologists (ASA) and Anesthesia Patient Safety Foundation (APSF) have published on April 29, 2020, a joint statement on perioperative testing for COVID-19 patients. They recommend screening for symptoms and nucleic acid amplification testing, not antibody testing before surgery. The World Federation of Societies of Anaesthesiologists (WFSA) also makes several recommendations regarding perioperative management of COVID-19 patients, including infection control measures, modifications in anesthetic and airway managements, and safety of HCPs.
The Ministry of Health and Family Welfare, Government of India, has recently released guidelines on rational use of PPEs by HCPs in preanesthetic evaluation clinics, EDs, OTs, and ICUs in non-COVID areas/hospitals as elective surgeries, which were discontinued amidst the COVID-19 crisis, are likely to restart. The lockdown and its extension has not only contained the community transmission of COVID-19, but also provided healthcare facilities opportunity to scale up their resources for possible surge in COVID-19 and non-COVID-19 patients once lockdown is released and elective healthcare services (out-patient, in-patient, and surgeries) are resumed. In this situation, HCPs including anesthesiologists will benefit from adopting the 6Ps—good planning, adequate preparation, repeated practice, appropriate protection, abundant patience, and careful performance of their activities in the new-found COVID-19 scenario.

Finally, the COVID-19 pandemic is an evolving situation with new knowledge rapidly replacing the old. Accordingly, since the acceptance of this manuscript, new advisories/recommendations are likely to be published, and readers are suggested to keep themselves abreast of the latest updates on this topic for the well-being of their patients, families, and themselves.

Conflict of Interest
None declared.

References