

“New Normal” for Anesthesia in Covid era

Milin R Shah* and Hema Kapoor

Department of Anesthesia, Kokilaben Dhirubhai Ambani Hospital and Medical Research Centre, Mumbai, India

Respected Sir,

We read with great interest, the review article “operating room and personnel during COVID-19 pandemic in case, when clinic is not yet on front line [1]. The authors’ stepwise guidelines and recommendations about operating theatre preparation for anesthesia and prevention of spread of COVID-19 are comprehensive and appreciable. Once the resource management, workflow processes and staff training are in place, in our experience, the anesthesiologist should always go through a checklist before conducting a case.

Tracheal intubation, non invasive ventilation, high flow nasal oxygen flow, bronchial suctioning, bronchoscopy and sputum induction are all classified as aerosol generating procedures [2]. A checklist or a cognitive aid should be used during donning and doffing of personal protective equipment (PPE) and one should be more careful during doffing where majority of self-contamination occurs [3]. It is advisable to have a shower after doffing. During general anesthesia, the intubation box can cause hindrance in difficult intubation situations. Mock drills and regular use of the intubation box in non-covid patients helps in refining the preparedness for various intubation scenarios. Use of video laryngoscope should be made a routine for tracheal intubation. Endotracheal tube cuff should be inflated before starting mechanical ventilation. During induction and pre oxygenation place two layers of wet gauze over patient’s nose and mouth to block secretions and place the anesthesia mask over it [3]. Two HMEF filters should be used, one between the tracheal tube and the breathing circuit and other one between the expiratory limb and the anesthesia machine. The HMEF filter should be replaced without fail every 3-4 hours in prolonged surgeries [4]. Closed airway suction should be used. Confirmation of endotracheal tube placement be done with EtCO₂, avoid auscultation of chest.

COVID positive patients should be operated in negative pressure operation theatre (OT). If negative pressure OT is not available then trunk off positive pressure system and air conditioner, maintain a laminar flow of air in the OT and increase air exchange to 15 to 20 circulations per minute. Ensure proper disposal of waste anesthesia gases (WAG) with a

corrugated tube dipped in 1% sodium hypochlorite solution, attached to the machine [2].

OT and COVID ICU should be close to each other. Avoid keeping the patients in post anesthesia care unit after the surgery and shift directly to dedicated COVID ICU or isolation wards. Limit the number of person in the OT.

While use of entonox is not classified as aerosol generating procedure, it’s should be only used in combination with single patient standard <0.05 mm pore hydrophobic filter to prevent viral contamination of the delivery system [3].

Simulation exercises for different surgeries in COVID positive patients help in assessing the preparedness of the anesthesia team. Although regional anesthesia is preferred, however PPE can make the procedure technically difficult and time consuming. The decision for labour epidural analgesia should be made relatively early. Avoid peripheral blocks like inter scalene block which might affect the phrenic nerve and pulmonary function.

Communication can be a challenge in full PPE. Assigning proper role to the team members and preparing an airway management plan should be done well in advance [2]. Bio-medical waste should be disposed of without delay. It should be double bagged, labeled, sealed, sprayed with chlorine disinfectant and then placed in an additional bag [3].

Supraglottic airway devices should be of second generation and should ensure leak free seal. They should not be completely ruled out until the patient breaths spontaneously and a leak free seal is ensured. Also it decreases the airway complications associated with tracheal intubation.

Separate anesthesia checklist for COVID positive patients is required.

We as anesthesiologist will have to make changes in our practice to accommodate this New Normal for safe anesthesia, safe patient and safe anesthesiologist.

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Correspondence to: Dr. Milin R Shah, Department of Anesthesia, Kokilaben Dhirubhai Ambani Hospital and Medical Research Centre, Mumbai, India, Tel: +9096590077; E-mail: drmilinshah7@gmail.com

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