Deployment of anaesthesia technicians in the second wave of COVID- 19 at level 3 centres: A novel initiative

Sir.

The second wave of coronavirus disease-2019 (COVID- 19) struck India in March 2021, and during this time, there was a sudden surge of sick COVID 19 patients. We are a tertiary care (Level 3) L3

centre with a capacity of 300 beds. As the number of sick patients increased, there was an increase in the numbers of patients requiring oxygen and ventilatory support. COVID-19 setup is a constrained setup with limited manpower and a high risk of aerosol exposure to health care workers (HCWs). Predictably, in such a scenario, the maintenance of airway and ventilatory equipment suffered as the patient load increased exponentially. The biggest issue during this second wave of COVID-19 was the infection of HCWs. So, overall there was limited trained manpower at our disposal.

Facing this paucity of trained HCWs, we explored utilising the services of anaesthesia technicians in our COVID 19 intensive care units (ICUs) and high-dependency units (HDUs). The anaesthesia technicians were available round the clock, and their job mandate involved maintaining the crash cart for emergency drugs, inventory of airway and ventilation equipment of all ICUs and HDUs and assisting in resuscitation, airway and ventilatory management and various interventions like setting up an intravenous line, arterial line and central venous line placement. Endotracheal intubation in COVID-19 cases many a times becomes complicated due to personal protective equipment (PPE).^[1,2]

Deployment of anaesthesia technicians in the second wave of COVID-19 at the L3 centre was a complete game changer as their introduction resolved equipment maintenance-related issues, a major bottleneck in the management of patients.

Due to frequent duty shifts in COVID-19 setups, the missing, misplacement and malfunctioning of airway equipment was regularly observed. After the deployment of anaesthesia technicians, such issues were completely sorted. The technician team maintained a complete inventory of all airway equipment in the ICU/HDU and also ensured that the complete airway and drug trolley was always ready and functioning. With inappropriate functioning of airway and resuscitation equipment, the HCWs are not only exposed to increased aerosol exposure but the frustration also mounts up since PPE somewhat blunts the reflexes. The technicians also took care of proper cleansing and disinfection of the airway equipment which is often neglected.

With the second wave receding and threat of an impending third COVID wave, we strongly recommend posting of anaesthesia technician teams in tertiary care COVID centres to facilitate vascular, airway and ventilatory management. We propose that this intervening lean phase of pandemic should be utilised in further training of anaesthesia technicians in an intensive care scenario, to serve in the role of force multiplier in the third wave of the pandemic.

From our experience, we recommend posting of anaesthesia technicians in COVID-19 L3 centres as a routine, as they are of immense help not only for maintenance of ventilators, bilevel positive airway pressure, high-flow nasal cannula, intubation trolley, etc., but also they are skilled enough to provide the much-needed technical help during various ICU procedures [Figure 1].

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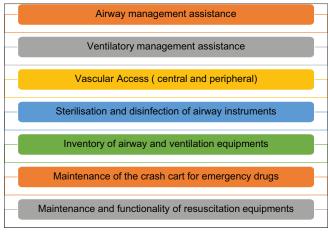


Figure 1: Summary of work done by anaesthesia technicians at L3 centre

Conflicts of interest

There are no conflicts of interest.

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