Anesthetic management of a COVID 19 suspected patient for mastectomy

Sir,
The coronavirus disease 2019 (COVID-19) is a pandemic caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). We describe anesthetic management of a covid 19 suspected patient we performed recently. A 68-year-old female patient, diagnosed case of breast carcinoma, was posted for radical mastectomy. She travelled from a badly disease hit European country 20 days back and was on strict home quarantine with no comorbidities. She had no signs of fever, cough, running nose, sore throat, or any respiratory difficulties. All investigations and airway examination were normal. As preliminary evidences suggest asymptomatic cases might contribute to the spread of disease, we undertook all precautions considering it as a positive case of COVID-19.

The case was posted as last in the elective list. The anesthesia plan was rapid sequence intubation without cricoid pressure to be performed by an experienced anesthetist. Protocolized machine check was done and only necessary drugs were loaded. C-Mac video laryngoscope with 6.5 and 7 mm endotracheal tube with stylet was kept ready. All other equipments, drug trolley, chairs, and all personal belongings were kept outside of the theatre. Anesthesia machine and C-MAC were covered with transparent disposable plastic sheets. Theatre air vents were closed. Disposable circuits with three heat and moisture exchangers (HME) were used. End tidal carbon dioxide (EtCO₂) sampling tube was connected to one HME placed at patient end and two were placed in series at the end of expiratory limb of the circuit entering the machine. Personal protective equipment (PPE) was wore by everyone inside the theatre and minimum number of people were involved.

Patient was directly wheeled into the theatre and was pre oxygenated with 100% oxygen 4L/min for 6 min. A transparent plastic sheet was spread over the mask, covering the upper half of the patient and the hands of anesthetist. Patient was given glycopyrrolate, fentanyl 2mcg/kg, propofol 2mg/kg, and succinylcholine 1.5mg/kg. Patient was not mask ventilated, after 1 min with C-MAC guidance intubated in first attempt under the plastic drapes, cuff fully inflated. Intubation was confirmed with EtCO₂, not by auscultation. Anesthesia was

Figure 1: (a) C-MAC Video laryngoscope, (b)Anesthesia machine, (c) HME at both ends of expiratory limb of breathing circuit
maintained with sevoflurane (1.5%–2%), in air and oxygen (1:1) at 1 lit/min flow rate with intermittent atracurium. Intra operative period was uneventful.

The plan was to extubate deep, to prevent bucking and coughing, and thus preventing the aerosol from coming out. Suction was done under vision using C-MAC. Once patient started taking spontaneous breaths, anesthetic gases were discontinued, reversal was given and extubated. A large clear plastic sheet with a small hole on centre was spread over the face mask, with the central orifice protruding out. It was connected to circuit and was held tightly over the face of patient over the plastic sheet. Patient was shifted to isolation unit once fully awake with nasal prongs and surgical mask over the face. Proper doffing method was practiced after the completion of the surgery by all people inside the theatre[5] and whole theatre with equipments was thoroughly decontaminated after the case. It should be remembered that while doing such cases safety measures for health professionals is of primary importance.

Declaration of patient consent
The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest
There are no conflicts of interest.

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