

Letter to the Editor

Electroconvulsive Therapy During the Coronavirus Pandemic

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Dear Editor

Covid-19 has been officially declared a pandemic by the World health organization. The world is undergoing a major transformation and what will be the new normal is yet to be determined. Therefore, the anesthesiologist has the dual responsibility of providing care to victims of pandemic and patients with severe mental illness requiring electroconvulsive therapy (ECT)

The covid -19 pandemic is likely to affect the mental health of healthcare professionals (HCP), survivors, and persons kept in isolation or quarantine. Data from the SARS outbreak showed that 40-60% of survivors suffered from depression and post-traumatic stress disorder (1). Jianbo Lai et al (2) surveyed mental health outcomes in HCP taking care of covid patients and found that a significant portion of HCP was feeling symptoms of insomnia, anxiety, distress, and depression. ECT should be considered as an emergent or semi-urgent procedure for patients suffering from suicidal tendencies, mania, catatonia, and severe depression so that treatment is not denied or delayed.

Doing ECT with limited resources due to pandemic is a challenging task. ECT requires general anesthesia which places anesthesiologists at close contact with patient airway secretion. Patients coming for ECT are kept in close contact with each other before and after the procedure posing a significant risk

of disease transmission. They are mainly elderly with several comorbidities which increase the risk of severe covid disease. Furthermore, they have poor body hygiene, live in crowded places, and not able to follow the recommendation of social distancing and hygiene. Another logistic challenge is the availability of adequate staff, HCF, PPE, N95 mask, goggles, gowns, hand sanitizers, and disinfectants during a pandemic of such severity.

Patients who are asymptomatic for COVID-19 disease should be considered for therapy. Covid-19 testing should be done for all patients a day before ECT and positive patients should not be allowed to undergo ECT. ECT theatre should be adequately ventilated with at least 5 air exchanges per hour. All surfaces and devices should be cleaned with a hypochlorite solution after each treatment. The number of healthcare personnel should be an absolute minimum in the ECT theatre.

The most common procedure of bag-mask ventilation without any airway aid poses a significant risk of viral transmission (3) Therefore, we recommend the following measures for the safe conduct of ECT-

1. It should ideally be performed in a negative pressure isolation room with all the staff wearing full PPE.
2. Proper disinfection of the ECT theatre with a gap of at least 30 minutes between patients (4).

3. Glycopyrrolate (0.2 to 0.4 mg) may be given before induction of anesthesia to reduce hypersalivation
4. Remifentanyl and lignocaine should be used at emergence to reduce coughing (3).
5. Ketamine, Methohexital, and etomidate should be used to get the best quality of seizure (5).
6. Adequate preoxygenation before induction to reduce the duration of bag-mask ventilation during apnea.
7. Nasal prongs can be used for oxygenation during apnea (3).
8. For cases requiring hyperventilation, a laryngeal mask airway may be used instead of bag-mask ventilation (3).
9. Outer gloves should be changed after each patient
10. Gown, face shield, and mask should be changed if they become contaminated with the patient's secretion
11. If the bag-mask ventilation method is used, the HEPA filter should be used and changed after each patient
12. Single-use bite block should be used
13. Patients should be recovered in a selected area with mouth covered with surgical face mask and 6 feet distance between them.
14. After the procedure, all equipment should be thoroughly cleaned

ECT should be considered as an essential

medical procedure and it should be made available to all patients suffering from serious mental illness. The recommendation and suggestion described here can guide anesthesiologists for safely conducting ECT during this viral pandemic.

Conflicts of Interest

The authors declare that there are no conflicts of interest.

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