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Electroconvulsive Therapy for Geriatric Depression in the COVID-19 Era: Reflection on the Ethics

Electroconvulsive therapy (ECT) is a highly effective treatment for severe, life-threatening and/or treatment resistant geriatric depression.

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WHO declared COVID-19 as a pandemic in March 2020.³ This illness carries high risk of morbidity and mortality in geriatric patients.

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4 ECT is a procedure that involves open airway management and has been considered an aerosol generating procedure.

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Though risk of transmission from ECT is still unknown, psychiatric services are challenged in providing ECT as an essential service while reducing the risk of COVID-19 spread. Several hospitals immediately shut down their ECT service leaving seriously ill geriatric patients untreated.

Mortality and morbidity rate from geriatric depression due to

suicide and physical deterioration is relatively high.

7.

8 Mortality and morbidity from COVID-19 is still unclear, though geriatric patients are likely at higher risk.

3 This creates a serious ethical dilemma to balance between the risk from untreated depression versus the risk from COVID-19. To balance between the ethical principles of autonomy, beneficence, nonmaleficence and justice is a significant challenge in this context.

9 Our approach at the at the Parkwood Institute-Mental Health Care Building, an academic site of Western University in London Ontario Canada, is to go through a rigorous patient prioritization process (see

Fig. 1), which is largely modeled after the recently published International Society for ECT and Neurostimulation recommendations.

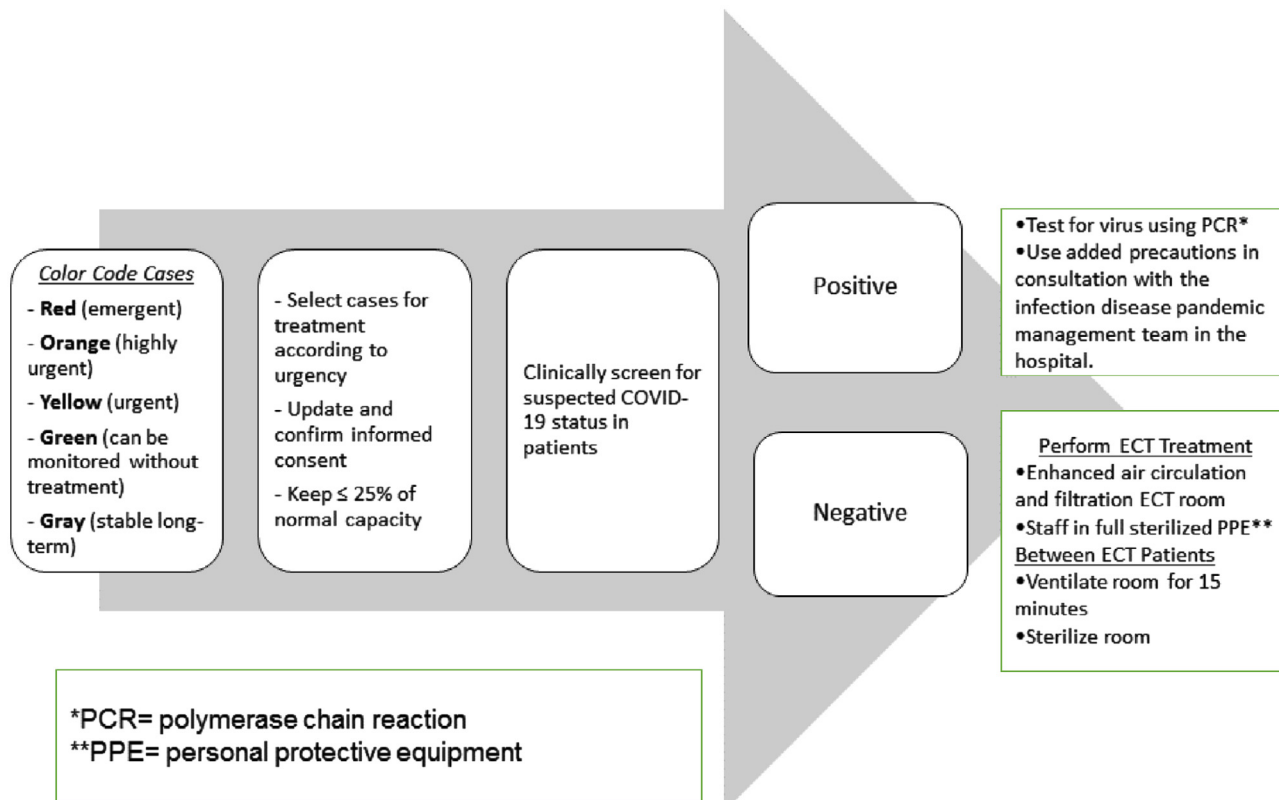
10 We colour-code cases to red (emergent), orange (highly urgent), yellow (urgent but can wait for up to 4 weeks), green (can be clinically monitored without treatment but provide quick access if the acuity changes) and gray (stable long term, can be re-referred for new episode of illness). For those that we select for treatment, we go through a revision of the informed consent

procedure to reflect the added risk of infection. We then conduct the ECT procedure in an ECT room that is modified to provide negative pressure and allow optimum air circulation between patients. All staff providing ECT are geared in full personal protective equipment, which is changed between patients while the room is being ventilated and sterilized. Prior to ECT, patients are screened clinically for COVID-19 status, and if screened positive, we would test for the virus using PCR

4. COVID-19 + status will require added precautions in consultation with the infection disease pandemic management team in the hospital. Out of the list of 45 patients, we triaged 2 to red zone, 6 to orange zone, 3 to yellow zone, 17 to green and 17 to gray zone. We were able to start or re-start ECT to all of those in the red and orange zone within a week of initiating this process.

It is our contention that seniors with life-threatening and/or severely distressing depression need to be prioritized to receive ECT as long as we follow a thoughtful selection process and infection control practices as outlined above. We intend to reflect on our practice postpandemic to evaluate the outcome from this practice to inform the field regarding pandemic and crisis

FIGURE 1. Patient Prioritization for ECT Treatment in the COVID-19 era.



preparedness in relation to severe mental illness and the use of ECT.

AUTHORS CONTRIBUTION

Amer M. Burhan: Initiated and conceptualized the paper, assigned tasks to other authors, corresponded with the editor, responded to reviewer, and finalized the paper in its current form.

Ajmal Safi: Searched, collected and summarized references used in this manuscript and worked with the third author on developing the first draft of the paper.

Mervin Blair: Revised and finalized the first draft of the paper,

contributed to the concept on ethical principles.

Richard O'Reilly: Developed the triage system reported in the paper, reported results to the first author, reviewed the manuscript and suggested modifications.

DISCLOSURE

Dr. Burhan reports that he served on advisory board for Janssen, (Ketamine for TRD indication), provided consultancy to Antheneum for medical research surveys, and received grants from Brain Canada, NIA/NIH, and CCNA/CIHR to investigate MCI and Alzheimer effect on gait and behavior.

Other authors declare no conflict of interest. Authors would like to acknowledge Therapeutic Brain Stimulation staff at Parkwood Institute-Mental Health for their support during this process and the hospital library services for supporting searches of the literature.

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