EDITORIAL

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Modification of Clinical Implications in Neurosurgery Practices in Covid Era

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ABSTRACT

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Coronavirus disease 2019 (COVID-19) has posed unparalleled threats and challenges to communities and healthcare systems worldwide. [1] In most nations, the increased burden of this pandemic disease has had a significant impact on the entire health system, including neurosurgical practice. [2-3] Intensive changes with clinical implications are made in neurosurgical practice in surgical scheduling, inpatient and outpatient clinics, emergency case management, and even research and educational programs.

Many countries have already taken the necessary steps, such as designating specific hospitals as COVID-19 pandemic hospitals, establishing quarantine centers, reorganizing health services, formulating new operational protocols, stockpiling essential equipment, and redeploying vital medical workforce and workforce to these centers. It's more important to provide updates and guidelines for the neurosurgical discipline, where practice trends have shifted dramatically. According to the University of Brescia in Italy, COVID-19 positive patients with chronic subdural hematoma had an 80% mortality rate.[4]In a control group handled before the pandemic; this rate was 3.7%. [4]A meta-analysis of nearly 1800 patients with COVID-19 found a correlation between a low platelet count and extreme COVID-19. [5]Rebleeding may occur due to thrombocytopenia, resulting in a poor outcome. Surgical surgery may also damage the immune system in COVID-19 subclinical patients, leading to the emergence of COVID-19 disease. [6,7]

Only dedicated operating rooms can be used for urgent surgical operations on COVID-19 positive patients. While no single central nervous system complication requiring a neurosurgical procedure has been recorded to date, it is still possible that neurosurgical patients who need emergency surgery are COVID-19 positive with a high virus load. Pre-operative screening is critical, particularly for those who may require surgery. Because of aerosol production's potential during intubation/extubation, positioning of the patient in a prone/park bench position, tracheostomy procedures, and prolonged proximity of the surgeon to the patient's head area, all cases undergoing surgery pose a high risk to the operative team. Surgical infection is typically based on the patient, but it is also necessary to pay attention to the operating room practitioner. All diagnosed (or suspected) COVID-19 cases are assigned to an OT with a hostile room pressure atmosphere in theoperational complexity corner with separate access.

The following are some of the recent emergency procedures:

• If possible, endovascular care, especially in neurovascular diseases, should be prioritized.

• Alternative treatment modalities, such as radiosurgery, should be addressed in some neuro-oncological disorders.

• Urgent neurosurgical cases in all neurosurgical subspecialties should be triaged and handled to prevent ethical concerns.

This pandemic has put a massive strain on human society as a whole. It's an enormous opportunity to promote domestic medical device manufacturing, such as ventilators, diagnostics, vaccines, and active pharmaceutical ingredients. We should be prepared to respond to quantum global functioning changes once the pandemic is over. From a neurosurgical and neurological point, COVID safety protocols must be enforced to ensure patient andall practitioners'safety.

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