ICU Consultation during COVID-19 Pandemic in Adult Acute Care

April 13, 2020

Recommendations:

1. **ICU consultation process**
    - Based on their assessment the most experienced physician responsible for the patient with confirmed/probable/possible COVID-19 will contact the ICU MD on call to ensure appropriate triaging. The pager number for the on-call ICU MD at each site can be found on ROCA.

2. **ICU consultation is recommended in patients with R1-R3 goals of care in the following situations**:
    - An increase in baseline oxygen requirements of ≥ 3LPM over 1-2 hours despite a trial of HFNC
    - An increase in respiratory rate ≥ 6 bpm over 1-2 hours

3. If a patient does not meet the above criteria for an ICU consultation but the attending physician would like to discuss their case further, the case can be discussed with the Respiratory MD on call. The pager number for each site can be found on ROCA.

Background and Rationale:

COVID-19 is an infectious syndrome caused by SARS-CoV-2. Early studies suggest ~ 15% of patients require admission and of those ~ 2.3% require mechanical ventilation. Given that intubation is an aerosol generating medical procedure (AGMP), which poses a risk of transmission to health care workers (HCW) the Care of the Adult Critically Ill COVID-19 Patient Annex D recommends intubation in a controlled setting with appropriate PPE by the most experienced physician. The intention of this document is to provide brief guidance to acute care physicians to optimize the timing of an ICU consultation in confirmed/probable/possible COVID-19 patients to ensure controlled intubation while utilizing ICU consultation services judiciously.

Currently there is no prospective data to accurately predict which patients with COVID-19 will require critical care. Small, retrospective studies from Wuhan, Hubei, China have suggested various clinical and laboratory findings that may be associated with mortality. These need to be interpreted with caution but can serve as an aid to the attending physician in determining which patients will require frequent monitoring and may be at a risk of clinical deterioration.

- Co-morbidities
    - Age ≥ 60, HTN, DM, CAD, COPD, CKD, active malignancy
- Vital signs on admission
    - RR > 24, HR > 125
- Laboratory investigations
    - Lymphopenia
    - Elevated hsTrop, ALT, LDH, D-dimer, ferritin
- Clinical scoring systems
    - CURB65 > 2, SOFA > 4.5

Lastly, this document has been created to provide early, controlled intubation to patients with confirmed/probable/possible COVID-19, while optimizing the ICU consultation process. This document does not replace clinical acumen and does not account for all criteria that may necessitate an ICU consultation. Given that COVID-19 is a novel disease entity, this document will be updated regularly as more information and guidelines become available.

References

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