Care of the Critically Ill COVID Patient[1, 2]

[1]These are suggested guidelines, but follow institutional protocols

[2] Critical care is a condition, not a location and critically ill patients are on a continuum, ranging from acutely ill to critically ill

NEUROLOGICAL Care

- Neuro assessment every 1-4 hours as needed (prn) severity of symptoms and intensity of treatments, including but not limited to:
    - Glasgow Coma Scale (GCS)
    - Level of Consciousness (LOC)
    - Pupils Equal Reactive and Round, reactive to Light (PERRL)
    - Richmond Agitation-Sedation Scale (RASS)
    - Movement of All Extremities (MAE)
    - Pain using VAS (Verbal Analog Scale) or CPOT (Crit. Care Pain Observation Tool)
    - Speech and swallow assessment
- If patient on sedation – daily awakening when INDICATED
- CAM (Confusion Assessment Method) ICU – daily when applicable
- Propofol, dexmedetomidine, midazolam infusions for sedation – if sedated, RASS documented every 1-2 hours
- Fentanyl infusion or PRN for pain
- If on continuous neuromuscular blocking agent (cisatracurium/vecuronium), patient should also be on continuous sedation and be monitored with bispectral index (BIS)/train of four
- Patients on sedation that do not require neuromuscular blocking agents will most likely need restraints. Restraints in the critical setting need to be renewed every 24 hours and are documented every 1-2 hours

CARDIAC Care

- Patient should be on continuous cardiac monitoring
- Monitor blood pressure (BP) every 1 hour at a minimum
    - If patient is on vasoactive medications, need BP at least every 10-15 minutes if not continuously monitored with an arterial line (AL). With initiation of new infusions (sedation or cardiac), BP/heart rate (HR) should be monitored more frequently.
- Cardiac assessment every 1-4 hours prn severity of symptoms and intensity of treatments, including but not limited to: rate, rhythm, presence of dysrhythmias, murmurs, pulses, skin temperature, and color
- Remember to print rhythm as well as central venous pressure (CVP)/AL strip for chart (per facility policy)
    - Zero AL/CVP at the beginning of shift and whenever hemodynamic results are questioned
    - Ensure transducers are leveled at the phlebostatic axis
- Hemodynamic lines should be continuously monitored for safety, but follow institutional protocols
- Vasoactive medications need to be charted hourly and/or utilize smart pump data in electronic health record (EHR)
    - Best practice: titrate only one vasoactive medication at a time
- VTE prophylaxis

RESPIRATORY

- Assessment every 1-4 hours prn severity of symptoms and intensity of treatments
- Assess quality and bilaterality of breath sounds and need for suction and suctioning (e.g., increased peak pressures/rhonchi)
- If your patient is on a ventilator, always assess the patient first, ventilator second!
- Evaluate arterial blood gases (ABGs)
- Document SPO_2 (pulse oximetry) and $ETCO_2$ (end tidal CO_2) if present
- Document location of endotracheal tube (ETT) once chest x-ray has confirmed proper position (e.g., 23cm @ lip)
- Assess for skin breakdown around ETT holder
- Ventilator weaning trials as appropriate
- VAP Bundle: head of bed (HOB) at 30 degrees (when tolerated), oral care every 2-4 hours, daily weaning

GI/Genitourinary (GU)

- Assessment of abdomen and all tubes q 1-4 hours. Irrigate as appropriate and ensure patency of all tubes/drains.
- Ensure no skin breakdown at tube sites and all are secured appropriately
- Date of last bowel movement (BM)
- Daily assessment of nutrition: when to start and what type is appropriate
- Sliding scale or insulin infusion for glycemic management
- Hourly urine output and daily fluid balance
    - With COVID-19, likely will initiate fluid sparing resuscitation
- Need for indwelling urinary catheter assessed daily: must be secured, tubing below bladder, bag never in bed or on floor
    - CAUTI Prevention

SKIN

- Critically ill patients are at highest risk for breakdown; follow institutional guidelines regarding specialty beds for critically ill patients
- Turn and reposition every 2 hours
- Heels floated or pressure reducing boots
- Check all pressure point areas, especially where tubes are secured
- Document using institutional skin/pressure injury tool/scale every 4 hours

LINES

- Peripheral intravenous (PIV), central lines and arterial lines needed to be assessed continually and charted every 1-4 hours, depending on institutional protocol
- Central lines dressing changes every 7 days with Chlorhexidine gluconate (CHG) () (or per facility policy)
- Arterial line (AL) dressing and tubing changes every 7 days (or per facility policy)