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Penn Medicine

Recommendations: Palliative Ventilator De-escalation Recommendations for COVID-19+ or PUI

Contents

Developed by Critical Care and Palliative Care for Penn Medicine

This guidance was developed with two main objectives:
(1) Keep patients comfortable at the end-of-life.
(2) Minimize potential novel coronavirus exposure to healthcare workers.

A. Pre-procedure

- Change code status to DNAR/DNI.
- Select "comfort measures only" in the Comfort Care Order Set (a green banner should appear in the patient's inpatient PennChart record)
- Make arrangements to have family visitor(s) present at bedside in accordance with current hospital visitation policy. Offer virtual option if family unable to be present at bedside with designated staff member managing the device and virtual meeting.
- Prepare family that the prognosis following ventilator de-escalation can be unpredictable, but with most patients with COVID-19 severe respiratory failure the prognosis is short, possibly minutes.
- If an automatic implantable cardioverter defibrillator (AICD) is present, determine if and when the device should be deactivated. To deactivate place suitable magnet over device. Consult EPS as needed.
- Stop neuromuscular blockade infusions and ensure it has worn off with TOF 4/4. Cannot rely on signs of "over breathing"; set respiratory rate as opioids or other sedatives being used for comfort may reduce central respiratory drive.
- Stop propofol and provide narcotics +/- benzodiazepines for respiratory distress.
- Discontinue tube feeds and dialysis.
- If patient is already receiving continuous opioid infusion, continue current drip and bolus for comfort q10 minutes prn until comfortable. Refer to the Comfort Care Penn Pathway for additional guidance on appropriate bolus dosing.
- If patient is not receiving continuous opioid infusion, order INITIAL MANAGEMENT in the Comfort Care Order Set. Bolus q10 min prn until comfortable. Refer to the Comfort Care Penn Pathway for additional guidance on appropriate bolus dosing.
- If patient is unconscious and on vasopressors, stop these infusions before de-escalating ventilator support (reduced perfusion in turn reduces patient's centrally-mediated sensation of dyspnea).
- If patient is conscious, may continue vasoactive infusions to support patient-family interaction if possible. However, avoid undertreating symptoms prior to extubation.

B. Procedure

- Complete all pre-procedure steps above
- Gather supplies: drape (surgical or plastic), clean towel or plastic bag for endotracheal tube (ETT), nasal cannula
- Extubate in Airborne Infection Isolation Room (AIIR), if available
- RN and RT staff must don PPE for airborne, droplet, and contact isolation; limit staff in room as possible
- If respiratory failure is primary etiology: De-escalate ventilator support to minimal settings over 5-15 min. to enable adequate symptomatic relief prior to extubation.
- If cardiac or other organ failure as primary etiology: Place patient on minimal settings (SBT) and assess respiratory effort/distress. If none evident, proceed with immediate extubation. If significant respiratory effort or distress, resume full support and then manage similar to the patient with primary respiratory failure to ensure adequate symptomatic relief prior to extubation.
- Drape the patient prior to extubation (to provide barrier between patient and RT/RN)
- Suction through the ETT
- Avoid positive pressure during extubation
- Deflate endotracheal cuff
- Remove ETT into clean towel or plastic bag. If plastic bag available, grab open end of ETT into plastic bag, sleeve remaining bag over ETT during removal, and seal closed with entire length of ETT inside
- Leave patient on room air or apply 2L supplemental oxygen via nasal cannula if determined appropriate for comfort.

C. Post-procedure

- Complete required death paperwork in MedView. Contact Pathology/Autopsy resident on-call with any COVID-related post-mortem procedural questions as policies are subject to change according to state and local Medical Examiner/Coroner jurisdiction.
- Support family; if concerned about complicated bereavement, make referral to Penn Wissahickon hospice team for bereavement support (through Social Work)