Emergency Medicine COVID-19 Critical Care Working Group

Emergency Department COVID-19 Airway Policies
Updated 03.17.20

Controlled and Emergent Intubation

- Timing: Intubate early in controlled fashion, when possible.
- Location: Intubation should occur in negative pressure rooms.
- PPE: Airborne precautions (PAPR>N95 + gown + double gloves) with correct don/doffing procedures (shroud PAPR recommended for operator)
- Use ED Pre-entry Intubation Checklist
- Support staff (minimize number): ED attending, ED RN, RT, +/- senior resident or 2nd attending (In full PPE standby, should patient require additional resources)
- Equipment: Use Glidescope and visualize monitor (avoid direct visualization of oropharynx while intubating = try avoiding direct laryngoscopy)
- Passive oxygenation (NRB) during intubation and try avoiding mask ventilation to reduce dispersion of secretions. Try avoiding apneic oxygenation, but if used, use at low rate (<5L/min).
- Intubation meds: RSI (deep sedation plus paralyze adequately with rocuronium to prevent patient from coughing) if possible
- Avoid bag mask ventilation if possible. If needed in hypoxemic patients, small tidal volumes with low pressure method must be used.
- Make sure to fully inflate ET tube cuff so there is no air leak.
- Use of stethoscope might not be possible if wearing PAPR. Use other methods (chest rise, fogging of tube, EtCO2) to confirm tube placement.
- Place viral filter right after the ET tube (contaminated secretions may theoretically leak into the EtCO2 tubing and perhaps back to the monitoring module).

iGel Change over

- Location: negative pressure room if available.
- PPE: Airborne precautions (PAPR>N95 + gown + double gloves) with correct don/doffing procedures (shroud PAPR recommended for operator)
- Support staff: ED attending, ED RN, RT, +/- senior resident or 2nd attending (In full PPE standby, should patient require additional resources)
- Technique: iGel change over (either of the following two methods)
  - Ambuscope through iGel (using tube exchanger or sacrifice techniques)
  - Removal of iGel and intubation using Glidescope
● Equipment: Use Glideslope/Ambuscope and visualize monitor (avoid direct visualization of oropharynx while intubating = try avoiding DL)
● Make sure patient is sedated and paralyzed (re-dose if needed) during the procedure

Use of Noninvasive Positive Pressure Ventilation (NIPPV) & High-Flow Nasal Cannula (HFNC)

● NIPPV and HFNC should generally not be used when there is high suspicion for COVID-19 as they may increase the risk of secretion dispersion. There may be specific clinical circumstances where NIPPV (e.g., COPD or CHF exacerbation plus viral syndrome) or HFNC (e.g., patient has “do not intubate” status might be considered.
  o Discuss safest approach with critical care, RT, and RN teams
  o Move patient to negative pressure ICU bed as soon as possible
  o If no other option negative pressure ED room may be used
  o NIPPV may be fitted with viral filter, but secretion dispersion still may occur
  o Oxygen flows should ideally be limited to <15 L/min