COVID-19 (Coronavirus Disease 2019) SOP for Airway Management

PPE and Isolation Precautions

1. Patients with COVID-19 are cared for using Special flu droplet and contact precautions.
    a. For intubation/airway management, clinicians should wear an N95 plus mask with eye protection or PAPR.
    b. Intubation should be conducted with either a HEPA filter running or in a negative pressure room. If a HEPA filter is used, it should be run during and for 30 minutes post procedure. Page Distribution (East pager 32310 West pager 92534) to obtain a HEPA filter.
    c. Plan ahead as it takes time to apply all isolation precautions and obtain a HEPA filter.
        i. Prior to intubation, review and practice donning and doffing gloves, gown, N95 and mask with eye protection or PAPR.
        ii. Pay close attention when doffing to avoid self-contamination.
        iii. Recommend a lowered threshold for planning elective or semi-elective intubations in relevant cases.
        iv. Given the risk of transmission with non-invasive ventilation, recommend proceeding early directly to endotracheal intubation in patients with acute respiratory failure.
        v. Crash intubations are to be avoided given the time needed to apply PPE and increased risk of infection to the laryngoscopist.
    d. Perform hand hygiene and apply gown, gloves, N95, and mask with eye protection or PAPR.

Intubation Procedure

1. Most experienced anesthesiologist available should perform intubation, if possible.
2. Check standard monitoring, vascular access, instruments, drugs, ventilator and suction prior to beginning procedure.
3. Avoid awake fiberoptic intubation, unless specifically indicated. Avoid atomized local anesthetic which can aerosolize the virus. Consider use of glidescope or other video laryngoscopes.
4. Plan for rapid sequence induction (RSI) and ensure skilled assistant able to perform cricoid pressure.
    a. RSI may need to be modified, if patient has very high alveolar-arterial gradient and is unable to tolerate 30 seconds of apnea, or has a contraindication to succinylcholine.
    b. If manual ventilation is anticipated, small tidal volumes should be applied.
5. Use five minutes of pre-oxygenation with oxygen 100% and RSI in order to avoid manual ventilation of patient's lungs and potential aerosolization of virus from airways.
6. Use five minutes of pre-oxygenation with oxygen 100% and RSI in order to avoid manual ventilation of patient's lungs and potential aerosolization of virus from airways.
7. Intubate and confirm correct position of tracheal tube using end tidal CO2.
8. Institute mechanical ventilation and stabilize patient.

Reviewed by D. Pepe, P. Mehrotra, J. Yang 3/13/20

Doffing of PPE and equipment disposal/disinfection

1. Dispose of intubation equipment in room in regular trash or disinfect with germicidal wipes. Wipe down surfaces with hospital germicidal wipes in the anteroom.
2. Remove gown and gloves in room, and remove N95 and mask with eye protection or PAPR in anteroom if present. After removing protective equipment, avoid touching hair or face before performing hand hygiene.

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