

COVID Pt Specific Urgent-Emergent Surgical Patient Management Guidelines

GENERAL GUIDENCE:

- Limit all entry into the room only as needed. KEEP a log of all people who enter and leave the OR
- Mark the OR at all entrances "Enhanced Airborne Precautions"...DO NOT ENTER UNLESS PART of the CARE TEAM
- During Intubation, only the absolute critical number of people that need be in the room, should be there. PAPR is preferred; if no PAPR possible, then N95 + Face Shield +isolation gown and gloves is appropriate.
- Huddle before the case with surgeon and have all essential needed equipment in the room to minimize room traffic. And place Potential needed equipment/supplies outside
- All staff in the OR need at a minimum Jefferson COVID Standards for PPE Usage. Please look for most updated protocol is on MyJeffHub COVID Site.
- All equipment must be wiped down before it leaves the room with appropriate Hospital Approved Dis-infectant wipe (drug boxes, transport monitors, ambu bags, etc)
- Room will need a terminal clean before anything else goes back into the room

ANESTHESIA MACHINE, CIRCUIT, & MONITORS:

1. Monitor

- a. Remove all unnecessary monitors, cables, and insure you are using the necessary monitors per Standard ASA Monitors
- b. If possible, make every effort to use the same monitor from the ICU, to minimize equipment usage/exposure, as appropriate.

2. Anesthesia machine

- a. Remove all unnecessary items from the anesthesia machine drawers
- b. Place round circuit HEPA HME circuit filter directly to the anesthesia machine, on the expiratory limb entry point (the one next to the APL valve) and then attach the breathing circuit.
 - **CRITICAL:** THE HEPA HME MUST STAY CONNECTED TO THE ANESTHESIA CIRCUIT AT ALL TIMES DURING PATIENT CARE, or the machine is "infected" and must be taken out of service for terminal cleaning.

3. Anesthesia Circuit Connection to Pt ETT:

- a. Place a HEPA filter HME on the anesthesia circuit between the face mask elbow and the wye of the circuit
 - Attach the gas sampling line to the sampling port of the HEPA HME

4. Suction Connection to Pt ETT:

- a. We will utilize a contained suction system to minimize aerosolization.
- b. Place a Halyard closed suction system for adults on the patient end of the HEPA HME, closer to the pt

ANESTHESIA AREA OPTIMIZATION:

5. DRUG Delivery Systems

- a. Remove the PYXIS machine from the operating room shutting down using correct procedure

6. Medication Supply for the COVID19 patient

- a. Prepare all medications, Recommended medications for the case include the following:
 - Propofol 20 ml (2)
 - Propofol 100 ml (1)
 - Lidocaine 100 mg (1)
 - Rocuronium 50 mg (4)
 - Phenylephrine syringe (2)
 - Ephedrine syringe (1)
 - Ondansetron (1)
 - Etomidate 20 ml (1)
 - Other medications as per your anesthetic plan for the case.
- b. Create a COVID Emergency drug box and bring into the operating room. Keep it in its sealed bag unless medications in the bag are needed. Medications in this box include likely include:
 - Epinephrine 1:10000 (2)
 - Atropine 10 m 0.1 mg/ml (2)
 - Sodium bicarbonate (2)
 - Phenylephrine syringe (2)
 - Ephedrine syringe (1)
 - Phenylephrine infusion (1)
 - Norepinephrine infusion (1)
 - Dexmedetomidine premixed bottle (1)

7. Declutter Area

- a. Remove any equipment in the room that do not plan to use, such as:
 - Remove unnecessary anesthesia supply carts from the room
 - fluid warmer?
 - Any unnecessary Syringe pumps that are not needed, per clinical judgement?
 - Extra IV poles?
 - Pumps that were in the room should go to the postoperative care location with the patient
- b. Create a COVID Surgical Supply Cart of Supplies, made of:
 - Place appropriate sized glove boxes for room personnel in the room
 - Cleaning wipes AF3
 - Hand sanitizer
 - Use a standalone forehead skin temperature probe to measure temperature
 - Put supplies in a sealed bag. Dispose of any unused items in an opened bag after the case is finished.
 1. ECG 5 pack (2)
 2. Pulse oximeter probe (2)

3. 20 ml syringe (4)
 4. 10 ml syringe (10)
 5. 5 ml syringe (4)
 6. ABG syringe (4)
 7. Red needles (12)
 8. syringe caps (12)
 9. Curoc caps
- Manifold IV set
 1. Prepare the number of sets you will need for the case before patient enters the OR
 - pump tubing (4)
 - IV PUMPS as needed
 - IV start kits (4)...20 G IV (2), 18G IV (2), 16 G IV (2)
 - Arterial cannula 20G (2)

AIRWAY MANAGEMENT SUPPLIES

8. Intubation Equipment:

- a. Laryngoscope and MAC3, MAC4 and Miller 3 blade
- b. HI-LO EVAC endotracheal tube sizes 7 and 8 or acceptable alternative
- c. McGrath or Glidescope or any other video-laryngoscope
- d. Halyard closed suction system for adults
- e. Disposable Bronchoscope if Available

9. PPE:

- a. Bring the PAPR machine, hose and hood into the operating room. **(Do not bring the carrying case into the operating room)**
 - If the patient is intubated wear the PAPR during transport
 - Make sure you put the PAPR, isolation gown and gloves on before you enter the room.
 - Stock extra N95 + Face Shield + Isolation Gowns + Gloves outside room to insure any “stat help can quickly put on the appropriate PPE”.
 - If a PAPR is not available for intubation, N95+Face Shield + Isolation Gown + Gloves is appropriate.
- b. IF CONCERN FOR DIFFICULT AIRWAY,
 - Notify ENT/SURGERY before proceeding of potential and COVID STATUS

Emergence, and transfer from the Operating Room

- ☐ If the Pt is extubated,
 - Recover them in a negative pressure room (extubate there if possible) in PACU.
 - If no Neg pressure room available in PACU, then extubate and recover them in the Operating room
 - Minimize O2 nasal cannula flow, consider not using at all if clinical appropriate
 - Pts in transport back to room need to where a surgical mask in transport, as clinically appropriate.

- If the patient is already Intubated, then:
 - a. Transport from ICU to Operating Room
 - Verify that you are wearing the appropriate PPE for transport.
 - Verify that there is a Halyard closed suction system connected to the endotracheal tube
 - Verify that there is a HEPA HME with gas sampling port connected to the Halyard closed suction system
 - Connect the Ambu bag to the HEPA HME during transport
 - Use the MP2 module on the patient's monitor as the transport monitor during transport
 - On arrival to the operating room, connect the anesthesia breathing system to the HEPA HME and connect the gas sampling line to the sampling port on the HEPA HME
 - **Never disconnect the continuous suction/HEPA HME from the patient's endotracheal tube**
 - **Never connect the gas sampling line between the patient and the HEPA HME**
 - Connect the MP2 monitor to the multi-measurement port of the Philips monitor to begin monitoring
 - Return the patient to the ICU using the same procedure used for transport to the operating room, but in reverse order

Cleaning the Anesthesia Location after a COVID19 Patient Case

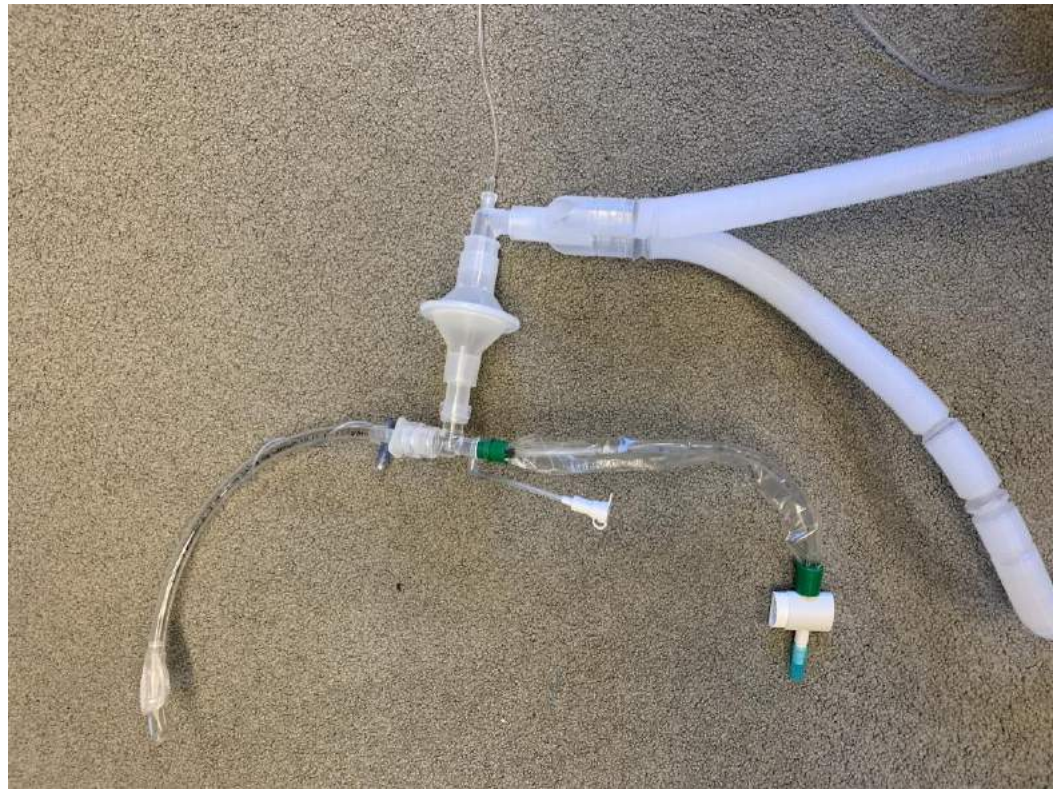
1. EVS or Appropriate staff will need to wear all appropriate PPE per Jefferson PPE Guidelines and use appropriate Hospital approved Dis-Infection wipe.
2. Discard glove boxed remaining in the room
3. Anes Tech, or responsible party, Clean the entire anesthesia machine and drawers, patient monitor, Cybernet, keyboard and mouse with appropriate wipes. Use enough cleaning solution to completely wet all surfaces and allow to dry. This should take at least 3 minutes, keeping the surfaces "WET" with the wipes continuously.
4. Clean the IV poles and any equipment used during the procedure.
5. Clean the COVID19 cart, including drawers, and discard items from any drawer opened during the procedure
 - a. Return the cart to its storage location and restock
6. After the operating room has been cleaned, all of the cleaning solutions used during cleaning are dry and the room has been cleared for entry, do the following
 - a. Return the two multi-measurement servers and monitor cables to the Philips monitor
 - b. Return the PYXIS machine to the operating room, plug it in, connect the interned cable and turn it on
 - c. Return the small beige cart to the operating room
 - d. Return other equipment that was removed from the room to the operating room
 - e. Return supplies to the anesthesia machine drawers
 - f. Place a new circuit and suction setup on the anesthesia machine

Checklist for COVID19 CART

- ECG 5 pack (2)
- Pulse oximeter probe (2)
- 20 ml syringe (4)
- 10 ml syringe (10)
- 5 ml syringe (4)
- ABG syringe (4)
- Red needles (12)
- syringe caps (12)
- other caps (4)
- Laryngoscope and MAC3, MAC4 and Miller 3 blade
- HI-LO EVAC endotracheal tube sizes 7 and 8
- videolaryngoscope
- Halyard closed suction system for adults
- HEPA filter HME
- Anesthesia circuit pack (1)
- Manifold IV set (1)
- pump tubing (4)
- IV start kits (4)
- 20 G IV (2)
- 18G IV (2)
- 16 G IV (2)
- Arterial cannula 20G (2)
- Cleaning wipes (Hospital Approved wipes)
- Hand sanitizer
- Glove boxes S, M, L
- Place medication bags in cart drawer if the cart is needed.

Appendix:

Suggested circuit configuration to minimize aerosolization of particles/droplets. **NOTE: sampling line must be filtered and suction tubing is a closed system**



HEPA Filter and Contained Suction (found in ICU supplies typically)

