UCSF Health

Interdisciplinary Guidelines for Adult Patients with COVID-19 Suspected or Confirmed Infection, in the Perioperative Environment (M/L and MB)

A. Initial Triaging of procedures for patients with known or suspected COVID-19*

1. For patients with suspected COVID-19 infection (patients with infection flags for COVID pending, COVID confirmed, Respiratory Illness isolation or Novel Respiratory Isolation), defer the procedure until the COVID-19 test results are available, if possible.
2. If the procedure can done at bedside, perform the procedure at bedside.
3. If the procedure cannot be deferred or done at the bedside:
    a. Schedule the patient by calling the OR Front Desk.
    b. Inform the E1 and Charge Nurse that the patient is COVID-19 + or COVID-19 pending,
    c. If feasible, consider intubating the patient in a negative pressure Airborne Infection Isolation room prior to transport to the OR.
        i. Intubation should be done per ICU protocol. All staff should don an N95 respirator plus eye protection or a PAPR in addition to a gown and gloves.
        ii. Limit individuals in the room to essential personnel only.
4. **At Moffitt-Long (M/L),** the case will be scheduled in OR 21 or OR 22#. When only one OR is used, the second room will be utilized for all backup equipment, supplies, implants, instruments, case cart and blood. Communication can occur using the window between the 2 rooms or by phone. When both ORs are in use simultaneously, the storage room adjacent to the anteroom will be utilized for backup equipment, supplies, etc. and communication will be by phone.
5. **At Mission Bay (MB),** the case will be scheduled in OR 11 or 12. ORs 9 and 10 will be used for backup equipment, supplies, implants, instruments, case cart and blood. Communication will be by phone.
6. The ORs remain positive pressure but the anteroom is negative pressure compared to the ORs and the corridor or core. It is vital to keep all doors closed as much as possible to keep room pressures regulated.
7. Personnel entering the OR suite (including the anteroom with the scrub sink) after an aerosolized generating medical procedure (AGMP) is performed (e.g., intubation, extubation) must wear an N95 respirator plus eye protection or a PAPR%, in addition to a gown and gloves.

B. Staffing of Surgical Cases

1. Staffing for the surgical case should minimized to the following:
    a. Nursing team (2 RNs or 1 RN/1 Scrub Technician).

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b. 1 backup circulator/technician will be stationed in second OR **(M/L)** immediately outside the OR **(MB)** to obtain supplies/equipment/blood cooler needed for the case and assist people with donning and doffing PPE
c. Attending anesthesiologist/CRNA or resident
d. Attending surgeon with senior resident
e. Relief for breaks should be provided only as necessary to decrease the number of people in and out of the room.

C. Transporting Patients with Known or Suspected COVID-19 Infection to the OR

1. Prior to transport, **all members of the surgical team** will meet to review the surgical and anesthesia plans, to ensure the room is ready, and all supplies, equipment, blood, and other materials are available in the OR and in working order. This team review will include, at minimum, the surgical attending, the anesthesia attending, the circulator and scrub, and back-up circulator/technician.
2. The Time Out of the Universal Protocol can be used as a reference.
3. Nursing will call everyone for the briefing. In most cases the review will be led by the surgical attending. Anesthesia will lead the discussion for aerosolized generating medical procedures (AGMPs).
4. Patients will be transferred directly to the OR. No COVID-19+ or COVID-19 pending patients will go to the pre-op or PACU areas.
5. Transport team will include:
    a. Anesthesia attending/CRNA
    b. Primary circulator
    c. Service Coordinator (if needed)
6. When transporting a patient:
    a. Prior to transport clean stretcher handles and IV pole surfaces with wipes.
    b. All persons involved in transporting a patient will obtain appropriate PPE (see below) required for transport from OR supplies, carry PPE to the patient's location, and don PPE prior to entry into the patient's room.
    c. One person is designated to attend to the patient and will avoid touching environmental surfaces (e.g., elevator buttons, door controls).
    d. An additional member of the transport team is designated to interact with the environment (e.g., elevator buttons, door controls).
    e. If two people are needed to move the bed, both must wear required PPE and a third person must accompany to interact with the environment.
7. Obtain PPE required for transport from the novel isolation cart kept clean in M401 **(M/L)** or by calling the Equipment Specialist assigned to the room **(MB)**.
8. Transport of a patient on Respiratory Illness Isolation (ex. Non-intubated patient)
    a. Patient will wear a surgical mask, worn over nasal cannula if used

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b. Prior to entry into the patient's room, transport staff having direct contact with the patient will don a surgical mask, eye protection, isolation gown, and gloves.
c. Team member designated to interact with the environment will wear a surgical mask but no gloves or gown. This person should not touch the patient during transport to avoid risk of contaminating the environment.

9. Transport of a patient on Novel Respiratory Isolation (ex. Intubated patient)
   a. Consider switching patient to a portable ventilator in the negative pressure ICU room (clamping ETT briefly during switch):
      i. Ensure a high efficiency hydrophobic filter is in place between the ETT and Ambu bag/Jackson-Reese or ventilator to avoid releasing infectious material to the surroundings.
      ii. Do not use the single-limb transport ventilator.
      iii. Consider using the portable ventilator in the OR with TIVA to avoid disconnects
   b. Prior to entry into the patient's room, transport staff having direct contact with the patient will don an N95 respirator plus eye protection (face shield or goggles) or a PAPR, in addition to an isolation gown and gloves.
   c. Team member designated to interact with the environment will wear an N95 respirator plus eye protection or PAPR.

D. Procedure Upon Arrival to Operating Room and During Surgery

1. Novel Respiratory Isolation signs will be posted on the doors to the OR suite to inform staff and minimize exposure.
2. A log will be placed on the exterior door to track all staff who enter the room.
3. The transporters and patients should enter the exterior door to the anteroom with patient and allow door to close.
4. Once the anteroom door is closed, they should enter the interior door to the OR with the patient.
5. Once the patient transfers to the OR table, the bed/gurney will be placed in the anteroom **(M/L**). **At Mission Bay**, the gurney will remain in the OR.
6. The primary circulator will strip the bed of the linens and wipe down the bed. The backup circulator / technician will place new linens on the clean bed.
7. The backup circulator/technician will remain clean and wear gown, gloves, eye protection and N95. They will remain in the second OR or the anteroom and should not be entering the OR suite with the patient.
8. The PPE cart will be stored in M401 (procedure room) **(M/L)**, or accessed by calling the Equipment Specialist assigned to the room **(MB)**.
9. Use of double gloves is standard practice in the OR. Indicator gloves are encouraged.

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10. Before any AGMPs (e.g., intubation and extubation) are performed, all OR personnel must don an N95 respirator plus face shield or a PAPR, in addition to gown and gloves.
    a. Once an AGMP is performed, additional OR personnel entering the OR suite (including the anteroom/scrub sink are) must don PPE outside of the anteroom/scrub sink area.
    b. If not scrubbed during the intubation, sterile personnel should wait 15 minutes prior to entering the room after extubation to gown and glove.
11. If general anesthesia is <u>not</u> required, the patient will continue to wear the surgical mask throughout the procedure.
12. If general anesthesia <u>is</u> required, the surgical team should step out of the room for 15 minutes during intubation and extubation, unless the surgical team (e.g. OHNS) is directly involved in airway management.
13. Consider disposable covers (e.g., plastic sheets for surfaces) to reduce droplet and contact contamination of equipment and other environmental surfaces.
14. Smoke evacuation electrosurgical pencils will be used to address the possibility of virus in electrosurgical smoke. Neptune suction machines have a HEPA filter for smoke.
15. For robotic and laparoscopic cases, use the pneumoclear desufflation mode. At Mission Bay, use AirSeal or the PALL Laproscopic Filter.

E. Post-surgical Procedures for Patients with Known or Suspected COVID-19 Infection

1. Doff gowns and gloves in the operating room and discarded into regular trash receptacle, then perform hand hygiene. Exit the OR with respiratory protection (face shields, N95 respirators or PAPRs) in place. N95 Respirators and PAPRs should not be worn outside the OR or procedure area unless during transport of a patient on novel respiratory isolation.
2. Exit the anteroom into the outside corridor.
3. If the patient will be immediately transported to an ICU, keep respiratory protection in place and don a new isolation gown and gloves.
4. If the patient will be recovered in the OR:
    a. If wearing a face shield and N95 respirator, perform hand hygiene then carefully remove face shield by holding the elastic band and place on a table for subsequent cleaning. Repeat hand hygiene, then carefully remove the N95 respirator and stored for reuse. Repeat hand hygiene. Wearing non-sterile gloves, use disinfectant wipes to clean the face shield. Remove gloves and repeat hand hygiene.
    b. If wearing a PAPR, perform hand hygiene then carefully remove the PAPR. Detach the PAPR face shield and place on a table for subsequent cleaning. Repeat hand hygiene. Wearing non-sterile gloves, use disinfectant wipes to

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clean the outer surface of the PAPR and the PAPR face shield. Remove gloves and perform hand hygiene.

5. **The scrub person**: At the end of the case, the primary circulator will bring the empty case cart into the OR. The scrub person will place dirty instruments in the case cart and spray instrumentation with approved enzymatic cleaner. The closed case cart will be wiped in the anteroom with hydrogen peroxide wipes prior to it being sent to the sterile processing department (SPD).
6. **The PACU nurse**: will wear an N95 or PAPR, eye protection, gown and gloves. There will also be a second PACU nurse in the second OR **(M/L)** or anteroom **(MB)** for assistance.
7. The patient will recover in the OR or in the ICU if the patient came from the ICU.
8. Move the patient from the OR table on to a regular floor bed prior to the surgical and anesthesia teams departure.
9. Prior to assisting with transporting the patient back to the inpatient location, OR team members involved in the transport will don appropriate PPE as described in the Transport section above.
10. After completion of patient delivery to the receiving inpatient location, OR team members involved in the transport will immediately doff PPE and perform hand hygiene. Face shields and PAPR face shields should be cleaned with a disinfectant wipe outside the patient's room and N95 respirators should be carefully doffed and stored for future use.
11. After the patient has left the OR, leave the room closed for one hour. The OR suite can then undergo routine terminal cleaning with an EPA-approved hospital disinfectant after the one-hour downtime. Technicians can use PPE routinely utilized for OR environmental cleaning and disinfection.

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