MGH ECMO Cannulation Strategies

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MGH COVID19 ECMO Cannulation Strategies:

1. Early Identification of Patients with potential ECMO needs.
2. Early Sheath Placement.
3. Cannulation should occur in the ICU to minimize hospital exposure.
4. A huddle should be performed prior to procedure.
5. Two Single Lumen Cannula placements is the preferred method of cannulation as opposed to Dual Lumen to minimize need for image/ECHO guidance.
    a. Cannula size should be determined cannulating physician prior to opening the package.
    b. An US should be in the room, with transthoracic probe if possible.
6. Minimize Staffing in the Room, Pre-Cannulation Huddle to determine who should be inside the room.
    a. ICU Nursing: 1-2, based on patient stability.
    b. OR Staff: 1-2, as determined by primary cannulating physician.
    c. Physicians: 1-2, as determined by primary cannulating physician.
    d. RT: 2.
7. Communication:
    a. The individual on headset outside of room should be a Perfusionist, ECMO specialist or ECMO physician at the time of cannulation.
    b. Clinician and Nurse available outside the room to write orders and fetch medications, equipment and run labs.
8. Isolation:
    a. Preference for patients to be in located in room with negative pressure and anteroom.
    b. Those needing to be in room prior to becoming sterile should place sterile gown and gloves over gown and gloves worn into room.
    c. All staff entering room are required to tap into the biothreats tracker or sign in if tracker not present.
    d. Circulate donning doffing video to all potential staff.
    e. ICU nursing to supervise both donning and doffing of all staff and assist them in the process.
    f. All needed additional equipment, medications, lab tests shall be placed in anteroom and picked up by the receiving team once the transferring team door is closed.
    g. OR cart will be placed in anteroom at end or procedure and all used OR equipment placed inside before cart is wiped down and removed from room.

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