

COVID-19 Emergency Department Cardiac Arrest – April 13, 2020 0838

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Introduction

Increasing evidence suggests that COVID-19 often presents with cardiac arrest in all age groups, whether through respiratory failure or myocarditis-induced mechanisms. Patients can present in any rhythm-thus VF/VT does not preclude COVID-19 as a culprit. We must ensure safety of providers during resuscitation events.

Staffing

1. Patient contact personnel to manage codes should be kept to 6 people at MAXIMUM. While well intended, others should not be within 6 ft to protect themselves.
2. **In room** personnel: FULL airborne PPE
 - a. 1 attending (team management)
 - b. 1 resident or fellow
 - c. 1 nurse (line and meds)
 - d. 2 techs (alternate compressions until LUCAS in place)
 - e. 1 resp therapist (BVM/ventilator)
3. **Outside room** personnel – outside of room with doorway open
 - a. 1 nurse (code recorder)
 - b. 1 techs (runner)
 - c. 1 pharmacist (crash cart, preparing meds)

Protection

1. **In room:** All personnel must wear at minimum N95 mask, gown, gloves and eye protection
2. **If intubating, PAPR is recommended for proceduralist.**
3. **Outside room:** Standard ED PPE

Equipment

1. Code carts should stay outside resuscitation bay/room. Bring defibrillator into the room. Other items can be passed from cart via runner to bedside. **Imperative to keep code carts clean from COVID.**
2. If EMS LUCAS in place, don't switch to our LUCAS, continue with EMS LUCAS. If no LUCAS in place, apply ours to minimize manual CPR and personnel exposure.
3. LUCAS and defibrillator will require careful cleaning following operator manual instructions.
4. After resuscitation, all equipment must be cleaned carefully, including monitor leads, monitor, defibrillator. Staff should do 5 minute "time out" to carefully identify any and all equipment used, similar to a "sponge count" in operating rooms.

ACLS

1. Early/immediate intubation recommended. ETT preferred over supraglottic devices (e.g. igel). Consider a supraglottic device if the first pass success rate is a concern.³⁶
2. Avoid bag valve mask as much as possible, but when used, must use viral filter. Ensure viral filter placed between facemask and resuscitation bag. After intubation, respiratory will move it to the appropriate position on the ventilator circuit (downstream of the exhaled air arm). PEEP valve should be used with BVM.
3. Hold compressions for intubation or any other oral access to decrease aerosol risk.

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4. Be prepared for VF/VT as well as non-shockable rhythms.
 5. Data suggest that unwitnessed arrests with asystole as initial rhythm have <2% chance of survival to hospital discharge.
 6. **Recommend rapid decision regarding (within 10 minutes) resuscitation care to cease efforts on unwitnessed, asystolic events.**

References: [COVID 19 Literature Bibliography.docx](#)