Cardiac Arrest in Pregnancy In-Hospital ACLS Algorithm for Patients With Suspected or Confirmed COVID-19

Continue BLS/ACLS*
- High-quality CPR
- Defibrillation when indicated*
- Other ACLS interventions (eg, epinephrine)

Assemble maternal cardiac arrest team

Consider etiology of arrest

Perform maternal interventions
- Perform airway management*
- Administer 100% O₂, avoid excess ventilation
- Place IV above diaphragm
- If receiving IV magnesium, stop and give calcium chloride or gluconate

Perform obstetric interventions
- Provide continuous lateral uterine displacement
- Detach fetal monitors
- Prepare for perimortem cesarean delivery

Continue BLS/ACLS
- High-quality CPR
- Defibrillation when indicated
- Other ACLS interventions (eg, epinephrine)

Perform perimortem cesarean delivery*
- If no ROSC, complete perimortem cesarean delivery ideally within 5 minutes after time of arrest

Neonatal team to receive neonate

Maternal Cardiac Arrest
- Team planning should be done in collaboration with the obstetric, neonatal, emergency, anesthesiology, intensive care, and cardiac arrest services.
- Priorities for pregnant women in cardiac arrest should include provision of high-quality CPR and relief of aortocaval compression with lateral uterine displacement.
- The goal of perimortem cesarean delivery is to improve maternal and fetal outcomes.
- Ideally, perform perimortem cesarean delivery* in 5 minutes, depending on provider resources and skill sets.

Advanced Airway
- Rapidly apply PPE before AGPs.
- In pregnancy, a difficult airway is common. Use the most experienced provider.
- Provide endotracheal intubation or supraglottic advanced airway.
- Perform waveform capnography or capnometry to confirm and monitor ET tube placement.
- For all ventilation, use a HEPA filter.
- Once advanced airway is in place, give 1 breath every 6 seconds (10 breaths/min) with continuous chest compressions.

Potential Etiology of Maternal Cardiac Arrest
A Anesthetic complications
B Bleeding
C Cardiovascular
D Drugs
E Embolic
F Fever
G General nonobstetric causes of cardiac arrest (H’s and T’s)
H Hypertension

Abbreviations: ACLS, advanced cardiovascular life support; AGP, aerosol-generating procedure; BLS, basic life support; CPR, cardiopulmonary resuscitation; ET, endotracheal; HEPA, high-efficiency particulate air; IV, intravenous; PPE, personal protective equipment; ROSC, return of spontaneous circulation.

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