Cardiac Arrest in Pregnancy In-Hospital ACLS Algorithm

Cascading numbered boxes correspond to actions the provider should perform in sequence. Each box is separated by an arrow that signifies the pathway the provider should take. Some boxes are separated by 2 arrows that lead to different boxes, meaning that the provider should take a different pathway depending on the outcome of the previous action. Pathways are hyperlinked.

Box 1

Continue BLS/ACLS

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

Box 2

Assemble maternal cardiac arrest team.

Box 3

Consider etiology of arrest

To perform maternal interventions, proceed to $\frac{Box 4}{Box 6}$. To perform obstetric interventions, proceed to $\frac{Box 6}{Box 6}$.

Box 4

Perform maternal interventions

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

Box 5

Continue BLS/ACLS

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

Box 6

Perform obstetric interventions

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

Box 7

Perform perimortem cesarean delivery

• If no ROSC in 5 minutes, consider immediate perimortem cesarean delivery

Box 8

Neonatal team to receive neonate

Sidebar

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

- 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.
- Once advanced airway is in place, give 1 breath every 6 seconds (10 breaths per minute) 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