Cardiac Arrest in Pregnancy Algorithm

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

Box 1

Start basic life support/advanced life support.

- Provide **high-quality CPR**.
- Provide continuous **left lateral uterine displacement** when the fundal height is at or above the umbilicus.
- Use **AED/defibrillator** when indicated.

Box 2

Activate cardiac arrest in pregnancy team.

- Address etiology of arrest.

If patient needs resuscitation during pregnancy, proceed to Box 3.
If patient needs resuscitation during delivery, proceed to Box 6.

Box 3

Optimize resuscitation in pregnancy

- Prioritize early airway management.
- Place IV above diaphragm.
- If receiving IV magnesium, stop magnesium and give calcium.
- Detach fetal monitors.
- Activate massive blood transfusion protocol if amniotic fluid embolism suspected.

Box 4

Goal is delivery by 5 minutes if no ROSC

If resuscitation is still needed, proceed to Box 5.
If delivery is achieved, proceed to Box 7.

Box 5

Continue advanced life support.

Box 6

Prepare for resuscitative delivery

When fundal height is at or above the umbilicus
Proceed to Box 4.

Box 7

Resuscitate newborn infant using the Neonatal Resuscitation Algorithm.

Sidebar

Explanation of Cardiac Arrest Interventions

- Cardiac arrest in pregnancy team will vary according to local resources but may include
  - Team leader
  - Anesthesiologist
  - Obstetrician
  - Neonatologist
  - Nurses
  - Pharmacists
  - Other professionals

- The goal of left lateral uterine displacement is to relieve aortocaval compression and to facilitate effective chest compressions.
- The goal of resuscitative delivery is to improve the pregnant patient's outcome, and when feasible, the newborn infant's outcome.
- Ideally, perform resuscitative delivery by 5 minutes, depending on local resources.
- In pregnancy, difficult airway is common and is managed (eg, endotracheal intubation or supraglottic airway) by the most experienced professional.

Etiologies of Cardiac Arrest

- Anesthetic complications
- Bleeding
- Cardiovascular
- Drugs
- Embolic (amniotic fluid or pulmonary embolism)
- Fever
- General Causes (H's and T's)
- Hypertension (eg, preeclampsia)