PALS - Contd

CPR Quality

- Push hard (2 ½ of anterioposterior diameter of the chest) and fast (100-120/min) and allow complete chest recoil
- Minimize interruptions in compressions
- Avoid excessive ventilation
- Rotate compressor every 2 minutes or sooner if fatigued
- If no advanced airway, 15:2 compression-ventilation ratio

Shock Energy for Defibrillation

- First shock 2 J/kg, second 4 J/kg, subsequent shocks > J/kg.
- Maximum 10 L/kg or adult dose

Drug Therapy

- **Epinephrine IO/IV dose**:
  - 0.01 mg/kg (0.1 mL/kg of the 0.1 mg/ml concentration. Repeat every 3-5 minutes . If no IO/IV access, may give endotracheal dose: 0.1 mg/kg (0.1 mL/kg of the 1 mg/mL concentration)
- **Amiodarone IO/IV dose**:
  - 5 mg/kg during cardiac arrest.
  - May repeat up to 2 times for refractory VF/pulseless VT
- **Lidocaine IO/IV dose**:
  - Initial 1 mg/kg loading dose
  - Maintenance: 20-50 mcg/kg per minute infusion (repeat bolus dose if infusion initiated > 15 minutes after initial bolus therapy)

Advanced Airway

- Endotracheal intubation or supraglottic advanced airway
- Waveform capnography or capnometry to confirm and monitor ET tube placement
- Once advanced airway in place, give 1 breath every 6 secibds (10 breaths/min) with continuous chest compressions

Return of Spontaneous Circulation (ROSC)

- Pulse and blood pressuer
- Spontaneous arterial pressure waves with intra-arterial monitoring

Reversible Causes

Hypovolemia
Hypoxia
Hydrogen ion (acidosis)
Hypoglycemia
Hypo or hyperkalemia
Hypothermia

Reversible Causes

Tension pneumothorax
Tamponade – cardiac
Toxins
Thrombosis, pulmonary
Thrombosis, coronary
Trauma