PAEDIATRIC ADVANCED LIFE SUPPORT

SAFE? - SHOUT ‘HELP’

Cardiac arrest recognised? (including bradycardia due to hypoxia or ischemia)

Commence / continue PBLS
Minimise interruptions
Ensure the EMS /ALS team is alerted
Attach defibrillator / monitor

Assess rhythm

Shockable

Return of spontaneous circulation

One Shock 4J/KG

Immediately resume CPR for 2 min
Minimise interruptions
After the third shock:
IV/IO amiodarone 5 mg/kg (max 300 mg)
IV/IO adrenaline 10 mcg/kg (max 1mg)

Non-shockable

Termination of Resuscitation

Give adrenaline IV/IO
10 mcg/kg (max 1mg) as soon as possible

Immediately resume CPR for 2 min
Minimise interruptions

DURING CPR
• Ensure high-quality CPR: rate, depth, recoil
• Provide bag-mask ventilation with 100% oxygen (2-person approach)
• Avoid hyperventilation
• Vascular access (intravenous, intraosseous)
• Once started, give adrenaline every 3-5 min
• Flush after each drug
• Repeat amiodarone 5 mg/kg (max 150mg) after the 5th shock
• Consider an advanced airway and capnography (if competent)
• Provide continuous compressions when a tracheal tube is in place. Ventilate at a rate of 25 (infants) – 20 (1-8y) – 15 (8-12y) or 10 (>12y) per minute
• Consider stepwise escalating shock dose (max 8J/kg – max 360J) for refractory VF/pVT (≥6 shocks)

CORRECT REVERSIBLE CAUSES
• Hypoxia
• Hypovolaemia
• Hyper/hypokalaemia, -calcaemia, -magnesemia; Hypoglycaemia
• Hypothermia - hyperthermia
• Toxic agents
• Tension pneumothorax
• Tamponade (cardiac)
• Thrombosis (coronary or pulmonary)

IMMEDIATE POST ROSC
• ABCDE approach
• Controlled oxygenation (SpO2, 94-98%) & ventilation (normocapnia)
• Avoid hypotension
• Treat precipitating causes

ADJUST ALGORITHM IN SPECIFIC SETTINGS (E.G. TRAUMA, E-CPR)