

Paediatric Defibrillation – ZOLL R Series ALS

Queensland Children's Hospital

Management of Cardiopulmonary Resuscitation

SHOCKABLE

Pulseless Ventricular Tachycardia



Ventricular Fibrillation



DC shock 4 J/kg (max. 200J)

2 min CPR
Assess rhythmIO / IV
access

DC shock 4 J/kg (max. 200J)

Followed immediately by
IV/IO Adrenaline
10 micrograms/kg (max. 1mg)
0.1 mL/kg of 1:10,000

2 min CPR
Assess rhythmSecure airway:
ETT / LMA

DC shock 4 J/kg (max. 200J)

IV/IO Amiodarone
5 mg/kg (max. 300mg)

2 min CPR
Assess rhythm

DC shock 4 J/kg (max. 200J)

IV/IO Adrenaline
10 micrograms/kg (max. 1mg)

2 min CPR
Assess rhythm

DC shock 4 J/kg
(max. 200J)

2 min CPR
Assess rhythm

DC shock 4 J/kg
(max. 200J)

IV/IO Adrenaline
10 micrograms/kg
(max. 1mg)

CPR

15 compressions : 2 breaths
Minimise interruptions
Attach monitor
Assess rhythm

NON SHOCKABLE

Asystole



PEA



IO / IV access

IV / IO Adrenaline
immediately
10 micrograms/kg (max. 1mg)
0.1 mL/kg of 1:10,000
Then every 4 mins
i.e. every 2nd loop

Assess cardiac rhythm
every 2 minutes
If rhythm organised
→ check pulse

Secure airway
ETT / LMA

Assess end tidal CO₂
NB: End tidal CO₂ will
be low in cardiac arrest

IO / IV fluids

IF NON
SHOCKABLE
DISARM
(on screen)

IF SHOCKABLE
PRESS
SHOCK

Consider and Correct Reversible Causes**4H's**

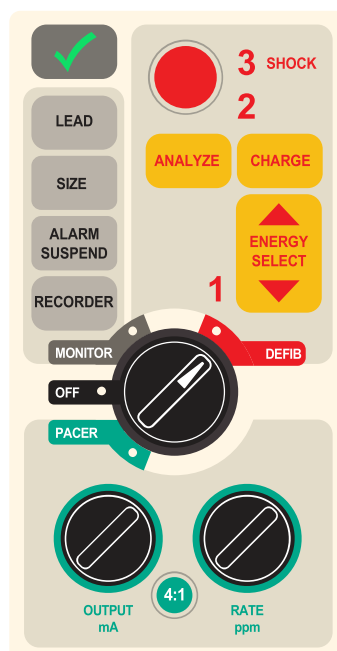
- Hypoxia
- Hypovolaemia
- Hypo / Hyperthermia
- Hypo / Hyperkalaemia

4T's

- Tamponade (cardiac)
- Tension pneumothorax
- Toxins / poisons / drugs
- Thrombosis – pulmonary / coronary

Consider IV Na Bicarbonate 8.4%
1mL/kg in cases of:

- Severe metabolic acidosis
- Hyperkalaemia



2 Press
CHARGE
Continue CPR
while charging

1 **ENERGY SELECT**
4 J/kg (max. 200J)
for all shocks

STARTTurn to **DEFIB**

Adapted from: Australian Resuscitation Council Guidelines Section 12, 2016. Available at resus.org.au & AHA Guidelines for CPR available from *Circulation*, 2020.



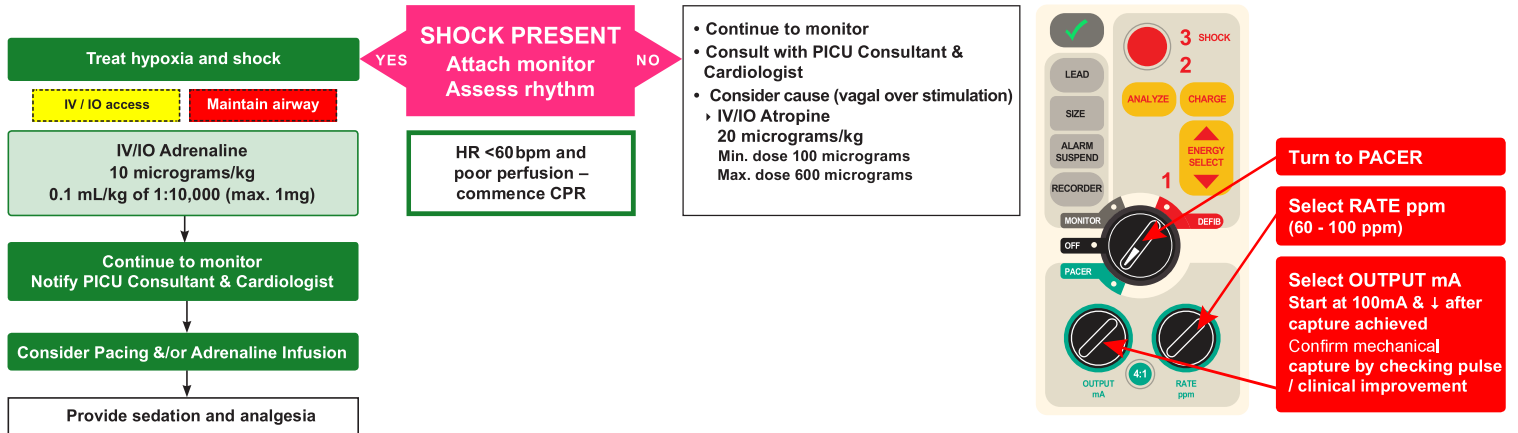
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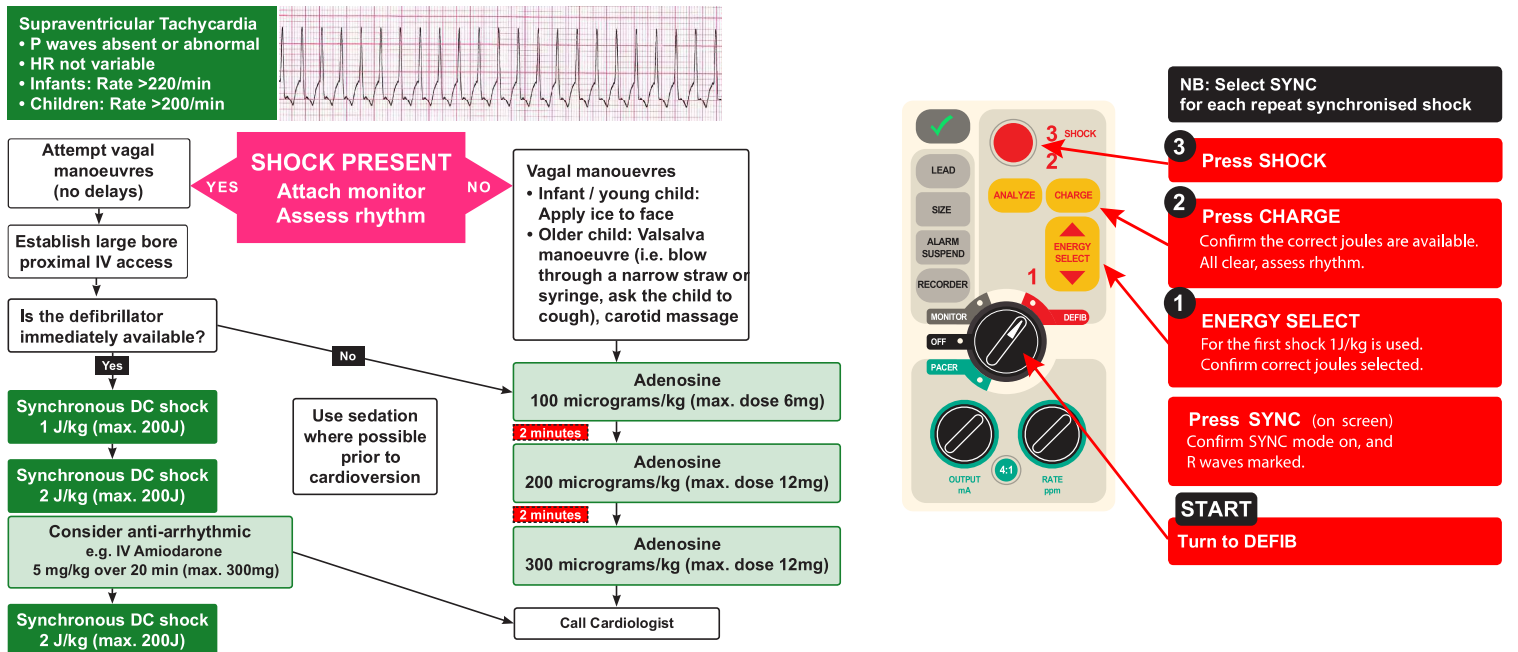
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Management of Bradycardia

Bradycardia causes: Commonly hypoxia – preterminal sign, poisoning / toxicological causes, raised ICP, vagal stimulation



Management of Supraventricular Tachycardia



Management of Ventricular Tachycardia (with a pulse)

