Advanced Life Support (Child)

Table 2.12 – ASSESSMENT and MANAGEMENT of:

Advanced Life Support (Child) continued

ASSESSMENT ■ Consider and correct reversible causes: 4Hs 4Ts	MANAGEMENT1. Hypoxia1. Tension pneumothorax2. Hypovolaemia2. Tamponade3. Hyper/hypokalaemia3. Toxic/therapeutic disturbance4. Hypothermia4. Thromboembolism
6. Shockable (VF/pulseless VT) These rhythms are less common in paediatric practice but more likely when there has been a witnessed and sudden collapse or in children with underlying cardiac disease	 Defibrillate the heart: Give 1 shock of 4 Joules/kg if using a manual defibrillator, rounding the shock up as necessary to the machine settings (this energy level is appropriate for both biphasic and the older monophasic defibrillators). If using an AED in a child over the age of 8 years, use the adult shock energy – paediatric attenuation is not required. If using an AED in a child under the age of 8 years, use a machine with paediatric attenuation (according to the manufacturer's instructions) when available. An AED should not routinely be attached to infants unless they have a history of cardiac problems. Where an infant is found to have a shockable rhythm, use a manual defibrillator to administer 4 Joules/kg. (In infants, if a manual defibrillator is not available, a paediatric attenuated AED may be used.) If no paediatric attenuated AED is available, use the adult shock energy at all ages.
	 Resume CPR: without re-assessing the rhythm or feeling for a pulse, resume CPR immediately, starting with chest compressions. Continue CPR for 2 minutes.
 Then pause briefly to check the monitor 	 If still VF/pulseless VT: Give a 2nd shock at 4 Joules/kg as for the 1st shock (see start of step 6). Resume CPR immediately after the second shock.
 Consider and correct reversible causes 	4Hs 4Ts (see above.)Continue CPR for 2 minutes.
Pause briefly to check the monitor	 If still VF/pulseless VT: Give a 3rd shock followed by adrenaline 10 micrograms/kg PLUS an intravenous or intraosseous bolus of amiodarone 5 milligrams/kg (refer to amiodarone guideline for further information). Resume CPR immediately and continue for another 2 minutes.
Pause briefly to check the monitor	 If still VF/pulseless VT: Give a 4th shock. Resume CPR, and continue giving shocks every 2 minutes, minimising the breaks in chest compressions as much as possible. Give adrenaline after every other shock (i.e. every 3-5 minutes) and a second dose of amiodarone following the 5th shock (refer to amiodarone guideline for further information) until ROSC.
 After each 2 minutes of uninterrupted CPR, pause briefly to assess the rhythm 	 If still in VF/VT: Continue CPR with the shockable rhythm (VF/VT) sequence. If asystole: Continue CPR and switch to the non-shockable (asystole/PEA) sequence as above.
 If an organised rhythm appears at any time, check for a central pulse 	 If there is return of a spontaneous circulation (ROSC) begin post-resuscitation care. If there is NO pulse, and there are no other signs of life, or you are not sure, continue CPR as for the non-shockable sequence as above.

Methodology

For details of the methodology used in the development of this guideline refer to the guideline webpage.

[Further related reading includes 63, 75]