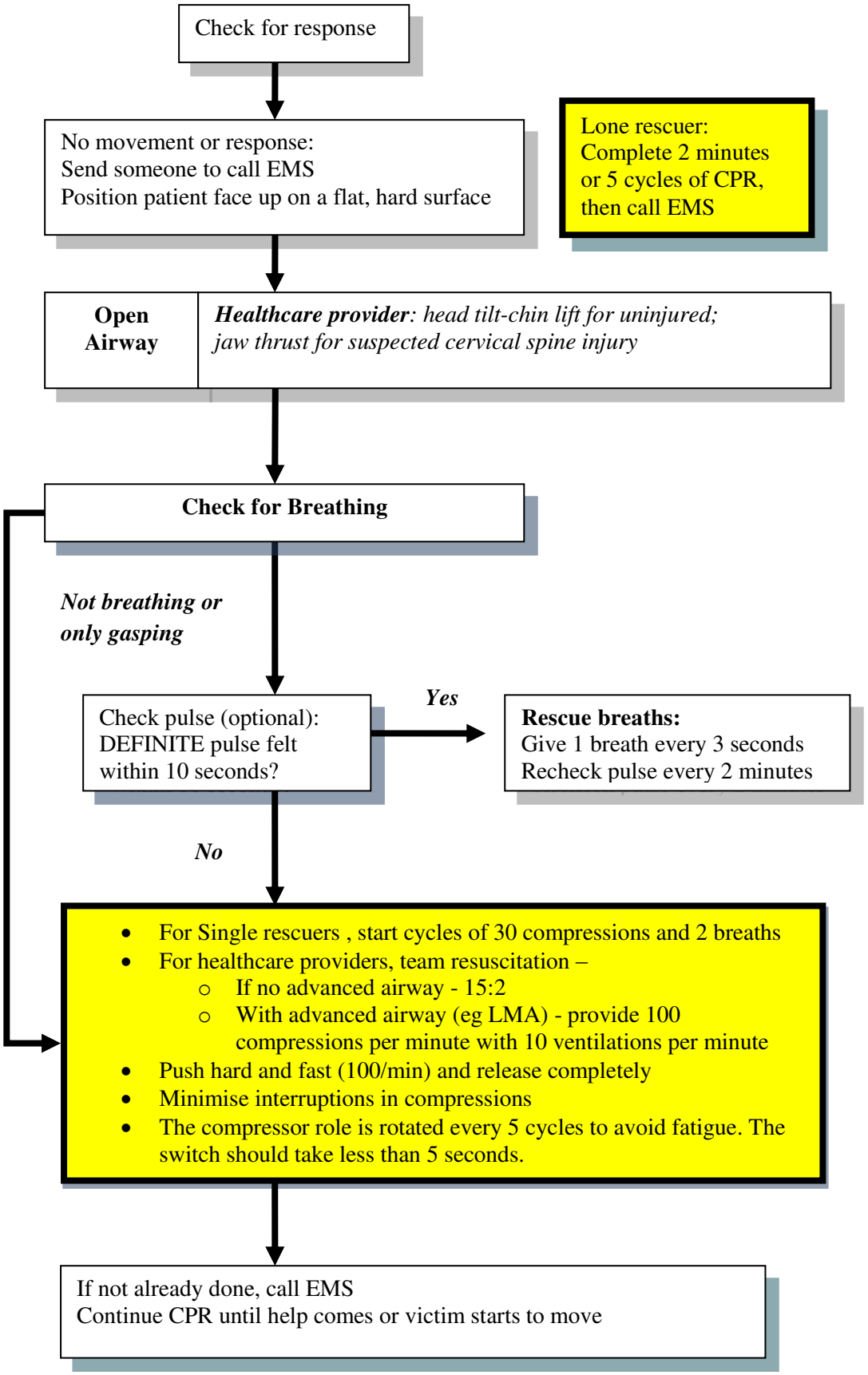
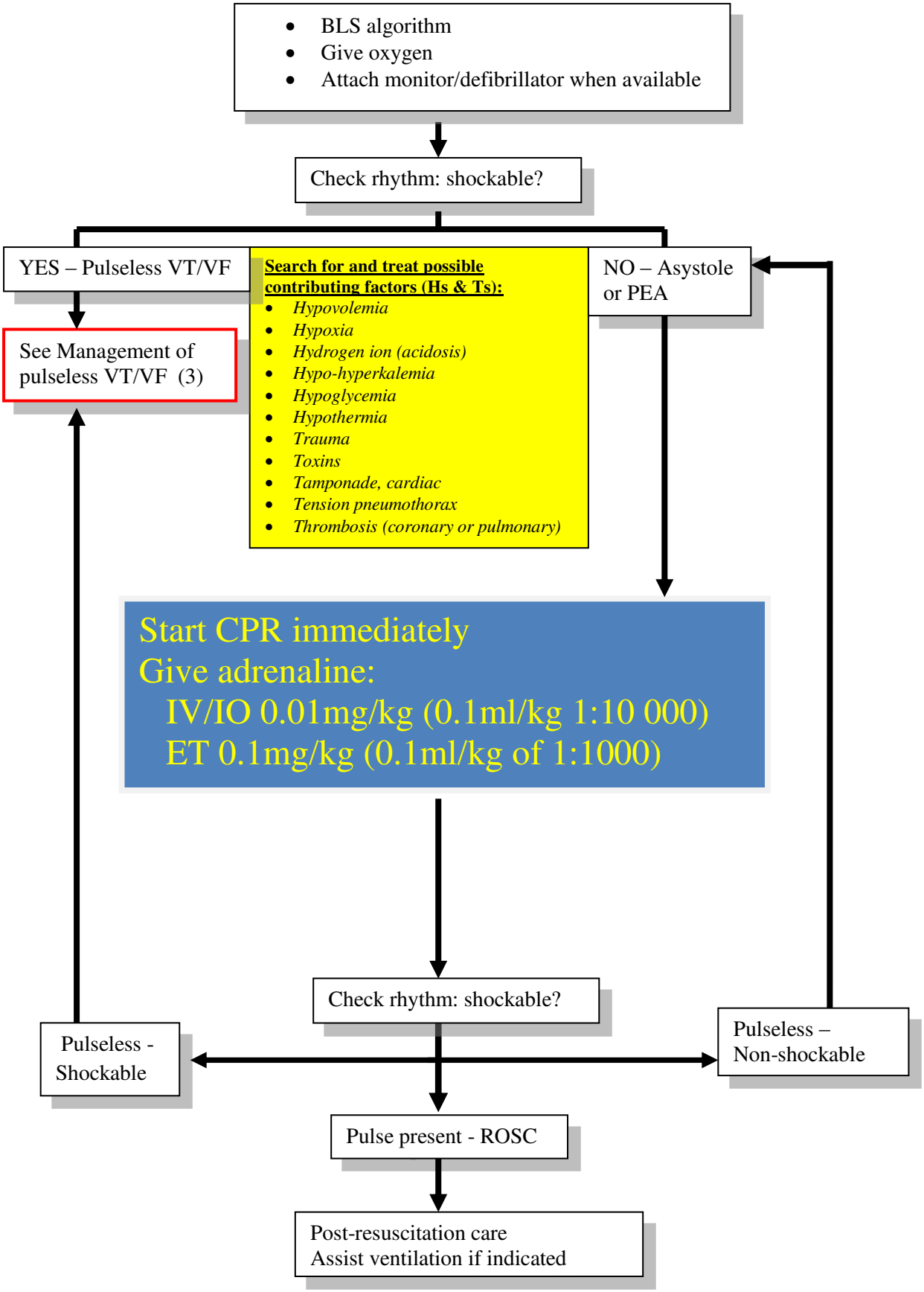
Source: Singapore Resuscitation Council 2016

1.PAEDIATRIC RESUSCITATION (HEALTHCARE PROVIDER)



2. ALGORITHM FOR PULSELESS ARREST (NON-SHOCKABLE)



3. ALGORITHM FOR PULSELESS ARREST - SHOCKABLE

- BLS algorithm
- Give oxygen (via BVM)
- Attach monitor/defibrillator when available

Check rhythm: shockable?

NOT SHOCKABLE - Asystole or PEA → See Management of Asystole or PEA (2)

YES / SHOCKABLE - Pulseless VT/VF

1st shock 4J/kg Resume CPR immediately. *Can use AED if > 1 year old*

CPR *

2nd shock 4J/kg Resume CPR immediately.

CPR

IV/IO adrenaline 0.01mg/kg; max 1mg q 3-5 mins or every other shock

3rd shock 4J/kg Resume CPR immediately.

CPR *

IV/IO amiodarone 5mg/kg
OR
IV/IO lignocaine 1mg/kg; max 100mg initial bolus followed by infusion 20-50 microgram/kg/min.

4th shock 4J/kg Resume CPR immediately.

CPR

Give adrenaline 0.01mg/kg; max 1mg q 3-5 mins or every other shock

5th shock 4J/kg Resume CPR immediately.

CPR *

IV/IO amiodarone 5mg/kg; max. 3 doses
OR
IV/IO lignocaine if not given earlier 1mg/kg; max 100mg Initial bolus followed by infusion 20-50 microgram/kg/min.

6th shock 4J/kg Resume CPR immediately.

Perform 2 mins of CPR then check for pulse and rhythm – shockable?

Give adrenaline every other shock (q 3-5 mins)

Consider other antiarrhythmics:
-IV/IO lignocaine 1mg/kg (max. 100mg) initial bolus followed by infusion 20-50microgram/kg/min. Repeat bolus img/kg can be given after 15 minutes after initiating infusion if delayed > 15 minutes
-IV/IO amiodarone 5mg/kg, up to 3 times
-IV/IO magnesium sulphate 50mg/kg (max2g) for Torsades de Pointes

Consider increasing energy dose of shocks to **max 10J/kg** for refractory VF

* ***CPR2 mins then check pulse and rhythm – shockable?***

- Minimise time between chest compressions and shock delivery.
- Check rhythm and shock immediately after chest compressions, rather than after rescue breaths, if possible.
- Minimise time between shock delivery and resumption of chest compressions.

During CPR

- Monitor CPR quality
- Check frequently for reversible causes – Hs,Ts **
- Advanced airway placement and confirmation

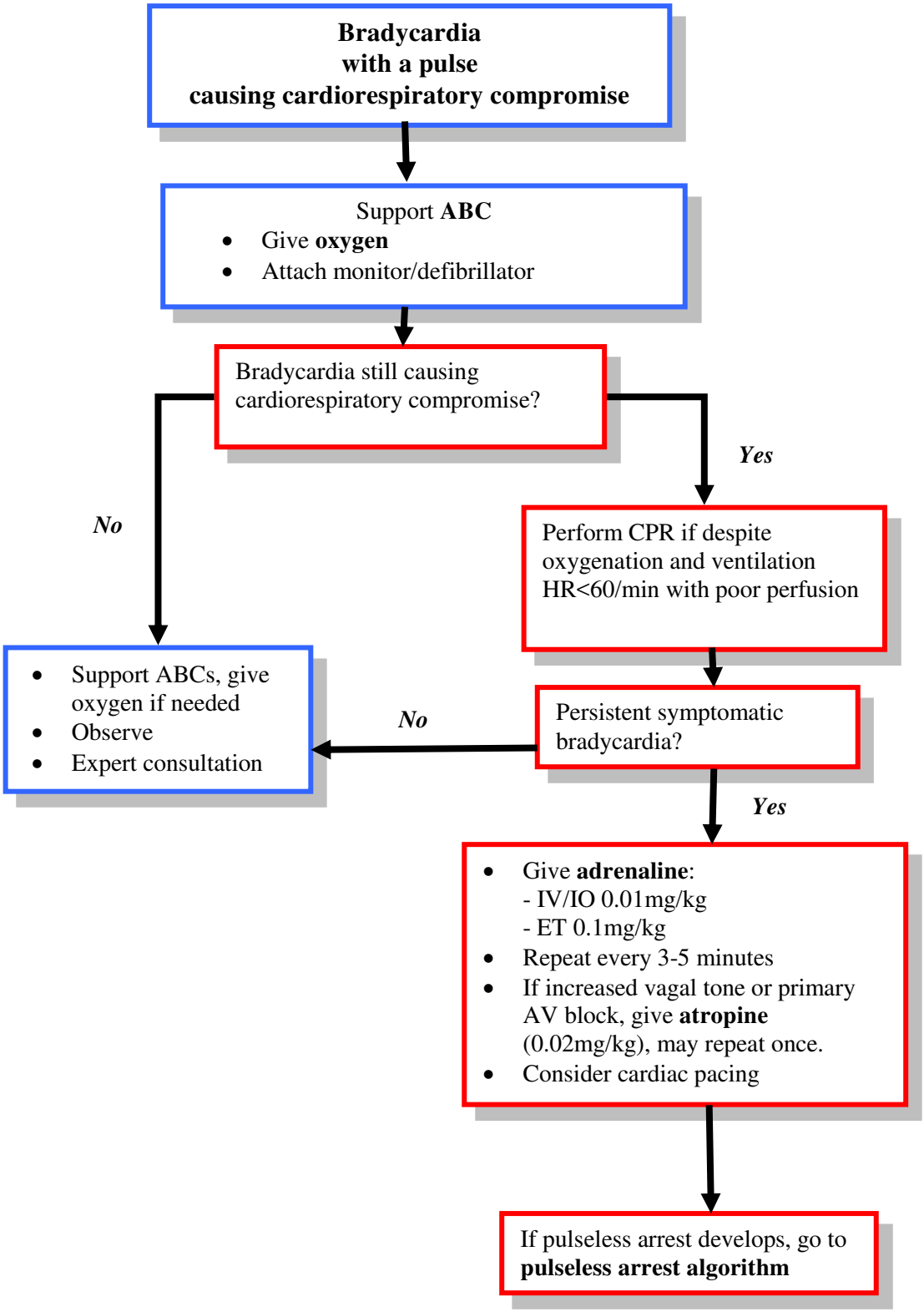
→ Pulse present / return of spontaneous circulation

- Post-resuscitation care

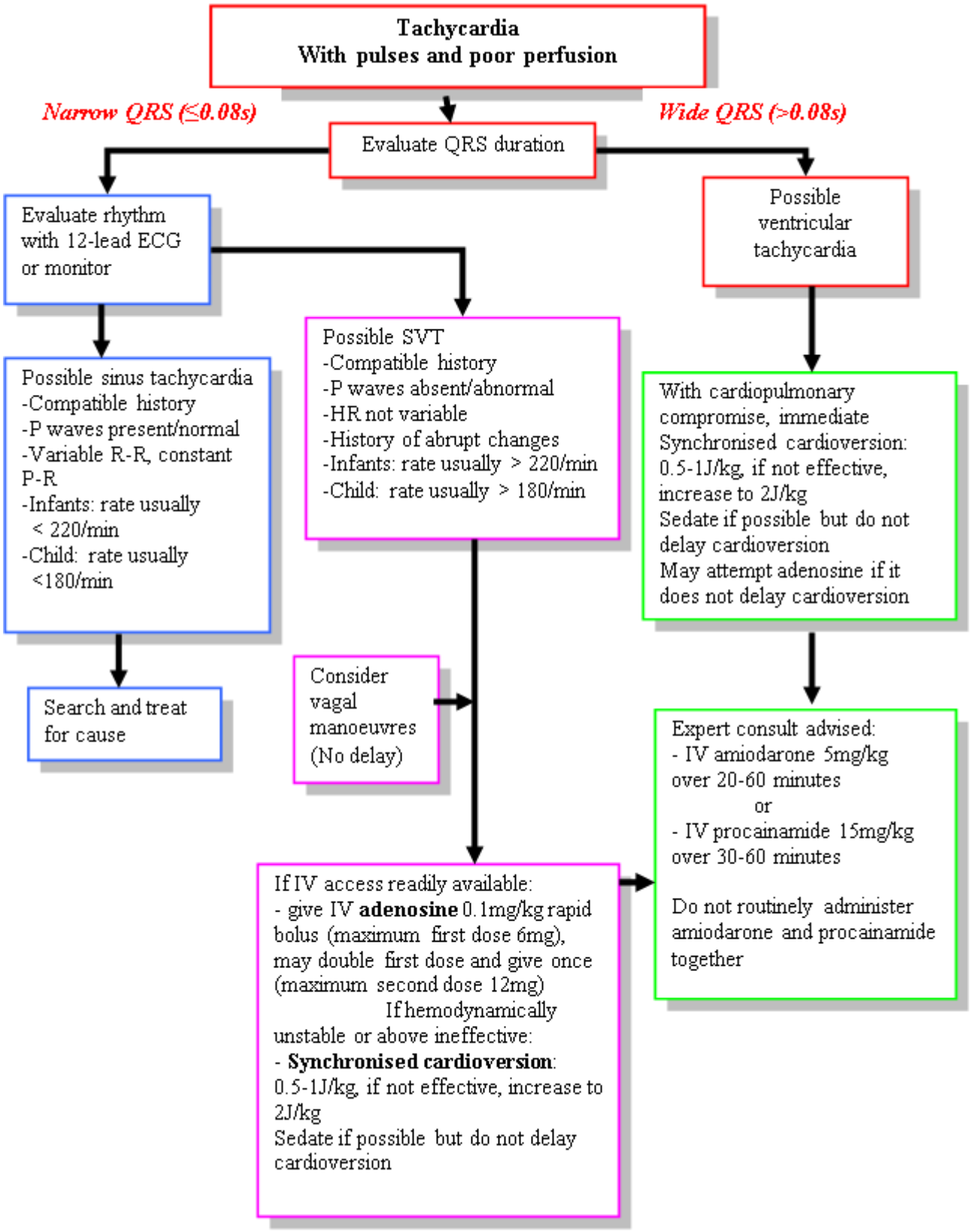
** **Search for and treat possible contributing factors (Hs & Ts)**

- Hypovolemia
- Hypoxia
- Hydrogen ion (acidosis)
- Hypo-hyperkalemia
- Hypoglycemia
- Hypothermia
- Trauma
- Toxins
- Tamponade, cardiac
- Tension pneumothorax
- Thrombosis (coronary or pulmonary)

4. ALGORITHM FOR BRADYCARDIA



5. ALGORITHM FOR TACHYCARDIA



6. ALGORITHM FOR NEWBORN RESUSCITATION