Resuscitation Algorithm for Stable Tachycardia

Stable tachycardia (age-specific)

Narrow QRS (≤ 0.08 s) | **Evaluate QRS duration** | *Wide QRS (> 0.08 s)*

Evaluate rhythm with 12-lead ECG and cardiac monitor

Possible ventricular tachycardia

Possible sinus tachycardia:
- Compatible history
- P waves present/ normal
- Variable R-R, constant P-R
- Infants: rate usually < 220/min
- Child: rate usually < 180/min
- Frequent assessments

Possible SVT:
- Compatible history
- P waves absent/abnormal
- HR not variable
- History of abrupt changes
- Infants: rate usually > 220/min
- Child: rate usually > 180/min

May attempt adenosine (SVT with aberrancy – regular and QRS is monomorphic):
- IV **adenosine** 0.1 mg/kg rapid bolus (max. first dose 6 mg), may double first dose and give once (max. second dose 12 mg)
- Frequent assessment of blood pressure and perfusion
- If unstable, refer to Fig. 8

Search and treat reversible causes

Trial of vagal manoeuvres
- Infants and toddlers:
  – Ice-pack/ice-water application to face 30 s
  – Gag reflex
- Older children:
  – Unilateral carotid massage
  – Modified Valsalva

If unsuccessful, obtain IV access:
- Give IV **adenosine** 0.1 mg/kg rapid bolus (max. first dose 6 mg), may double first dose and give once (max. second dose 12 mg)
- Frequent assessment of blood pressure and perfusion
- If unstable, see Fig. 8

Unsuccessful but remains stable with frequent assessment (if unstable, see Fig. 8)
Expert consult advised:
- Look for reversible causes if appropriate
- Other agents as advised by paediatric cardiologists (e.g. calcium channel blockers, propranolol, amiodarone); caution with use of multiple agents (heart block, hypotension)
- Synchronised cardioversion with sedation can be considered in refractory cases after discussion with paediatric cardiologists
- Initial dose: 0.5–1 J/kg, step up to 2 J/kg if necessary