

Narrow Complex Tachycardia

Narrow complex tachycardia in pediatric patient may represent:

PROBABLE SVT OR PROBABLE SINUS TACHYCARDIA

Probable SVT if:

- a. History of rate changes
- b. P waves are absent and/or abnormal
- c. HR not variable
- d. Infants: rate usually ≥ 220 bpm
- e. Children: rate usually ≥ 180 bpm

Probable Sinus Tachycardia if:

- a. Known cause
- b. P waves are present and/or normal
- c. Constant P-R; variable R-R
- d. Infants: rate usually < 220 bpm
- e. Children: rate usually < 180 bpm

Pre-Medical Control

1. Follow the **General Pre-Hospital Care Protocol**.
2. Consider 12-Lead EKG if available and patient is stable. Consider vagal maneuver.

PROBABLE SVT

STABLE

1. Contact Medical Control early.
2. Administer Adenosine 0.1 mg/kg IV/IO (maximum 6 mg). Adenosine must be given by rapid IV push (over 1-3 seconds) by immediate bolus of 5 -10 ml NS. Adenosine success may be enhanced by administration through an antecubital IV with the arm elevated above the level of the heart during injection. May repeat with 0.2 mg/kg IV/IO (maximum 12mg) and contact Medical Control.

UNSTABLE

1. Consider sedation before cardioversion if patient is conscious. DO NOT delay cardioversion for administration of sedation or trial of adenosine.
2. In borderline unstable patients, adenosine may be tried. Administer Adenosine 0.1 mg/kg IV/IO (maximum 6 mg), May repeat with 0.2 mg/kg IV/IO (maximum 12mg).
 - If HR greater than 180, consider Synchronized Cardioversion, 0.5 – 1 joules/kg. If no conversion then repeat at 2 joules/kg, then at 4 joules/kg.
 - Contact Medical Control.

PROBABLE SINUS TACHYCARDIA

1. Assess for cause of sinus tachycardia.
2. Follow other appropriate protocol.

Sedation :

(Select Options)

(Titrate to minimum amount necessary)

- Midazolam 1-5 mg IV/ IO (0.05 mg/kg) titrated slowly may repeat every 5 minutes until maximum of 0.1 mg/kg
- Diazepam 5-10 mg IV/ IO (0.1 mg/kg) titrated slowly may repeat every 5 minutes until maximum 0.3 mg/kg
- Lorazepam 1-2 mg IV/ IO (0.1 mg/kg, max 4 mg/dose) titrated may repeat every 5 minutes until maximum of 8 mg
- Fentanyl 1 mcg/kg IV/IO

Narrow complex tachycardia in pediatric patient may represent:

<p align="center"><u>Probable SVT</u></p> <ul style="list-style-type: none"> • History of abrupt rate changes • P waves absent/abnormal • HR not variable • Infants: rate usually ≥ 220 bpm • Children: rate usually ≥ 180 bpm 	OR	<p align="center"><u>Probable Sinus Tachycardia</u></p> <ul style="list-style-type: none"> • Known cause • P waves present/normal • Constant P-R; variable R-R • Infants: rate usually < 220 bpm • Children: rate usually < 180 bpm
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Follow **General Pre-hospital Care Protocol**
 Consider 12-Lead EKG, if available and patient stable
 Consider vagal maneuver

Probable SVT
Unstable with signs of Poor Perfusion

Probable Sinus Tachycardia

STABLE

UNSTABLE

**Assess for cause of
sinus tachycardia**

**Contact Medical
Control**

**Sedation before cardioversion if
patient conscious (see box at right)**

DO NOT delay cardioversion

**Follow other appropriate
protocol**

Adenosine 0.1 mg/kg IV/IO
 (maximum 6 mg)
 Adenosine must be given by rapid
 IV push (over 1-3 seconds) by
 immediate bolus of 5-10 ml NS

Adenosine success may be
 enhanced by administration
 through antecubital IV with arm
 elevated above level of heart
 during injection

May repeat with 0.2 mg/kg IV/IO
 Maximum 12 mg and contact
 medical control.

In borderline unstable patients,
 adenosine may be tried

Administer adenosine 0.1 mg/kg
 IV/IO (maximum 6 mg). May
 repeat with 0.2 mg/kg IV/IO
 (maximum 12 mg)

**If HR greater than 180, consider
Synchronized Cardioversion**
 0.5 - 1 joules/kg
**If no conversion, repeat
 at 2 joules/kg,
 then at 4 joules/kg**

**Contact Medical
Control**

Sedation :
(Select Options)
(Titrate to minimum amount necessary)

- Midazolam 1-5 mg IV/ IO (0.05 mg/kg) titrated slowly may repeat every 5 minutes until maximum of 0.1 mg/kg
- Diazepam 5-10 mg IV/ IO (0.1 mg/kg) titrated slowly may repeat every 5 minutes until maximum 0.3 mg/kg
- Lorazepam 1-2 mg IV/ IO (0.1 mg/kg, max 4 mg/dose) titrated may repeat every 5 minutes until maximum of 8 mg
- Fentanyl 1 mcg/kg IV/IO