Supraventricular Tachycardia (SVT)

SVT is the most common symptomatic arrhythmia in children. Infants may just be fussy and tachypneic, while older children may describe chest pain. Normal heart rate varies with age and condition (fever, exercise, etc) but a narrow complex tachycardia **over 200-220**, is considered SVT.

If they ask what is the first thing to do in a cardiovascularly stable patient in SVT (HR greater than 220), the correct answer is **obtain a 12 Lead EKG**.

In a stable child, you would then try **vasovagal maneuvers**, such as brief facial stimulation (cold, wet cloth or ice bag); to induce the "diving reflex" that normally slows down the heart.

Adenosine is the drug of choice to slow the heart down, and in some cases **atrial overdrive pacing** would be appropriate.[11] If the adenosine works but the SVT returns right after the adenosine is given, then the appropriate treatment is **IV diltiazem**.

If you are presented with a patient in SVT who is demonstrating signs of cardiac failure, vasovagal maneuvers would not be the correct choice. In this case, **adenosine** would be appropriate immediately. If IV adenosine is unavailable, **cardioversion** would be the most appropriate next step.

Digoxin is sometimes used in the long-term management of children with SVT.
Digoxin is contraindicated in children with Wolff-Parkinson White syndrome.

Verapamil is not indicated for SVT in children, especially those younger than one year, because it can cause cardiac arrest.

[11] But I would not try this at home, or in clinic.