



# County of Santa Cruz

## HEALTH SERVICES AGENCY

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EMERGENCY MEDICAL  
SERVICES PROGRAM

Protocol No. C4-P  
Reviewed 04/01/2010

### Emergency Medical Services Program

Approved

Medical Director

Subject: TACHYCARDIA >220 WITH PULSES

**I. BLS Treatment Protocol:**

- A. Treat life threats (See Policy 4000)
- B. Prepare for transport / transfer of care.

**II. ALS Treatment Protocol:**

- A. Treat life threats (See Policy 4000)
- B. Cardiac Monitor: Confirm rate >220
- C. Consider 12-lead-ECG. Transmit as needed for treatment guidance.
- D. **Stable (*Adequate perfusion, no altered mental status*)**

1. Transport.
2. Contact Base Station.

**E. Unstable (*Inadequate perfusion*)**

1. If patient is unstable but **conscious with narrow complex**
  - a) Consider Adenosine:
    - 1<sup>st</sup> dose: Adenosine rapid 0.1mg/kg IV/IO (max 6 mg);  
if no change after 1-2 minutes
    - 2<sup>nd</sup> dose: Adenosine rapid 0.2mg/kg IV/IO (max 12 mg);  
if no change after 1-2 minutes
    - 3<sup>rd</sup> dose Adenosine rapid 0.2mg/kg IV/IO (max 12 mg);  
(Maximum single dose: 12mg)
  - b) Transport
  - c) Contact Base Station
2. If patient is unstable but **conscious with wide complex:**
  - a) Versed 0.2 mg/kg IM (max 10 mg) or 0.1 mg/kg IV/IO (max 5mg)
  - b) Synchronized cardioversion 1J/kg; if no change 2J/kg; if no change 2J/kg;
  - c) Transport
  - d) Contact Base Station
  - e) Consider Lidocaine 1mg/kg IVP/IO

3. If patient is unstable and **unconscious with wide or narrow complex** \*\*:
  - a) Synchronized cardioversion 1J/kg; if no change 2J/kg; if no change 2J/kg;
  - b) Transport
  - c) Contact Base Station
  - d) Consider Lidocaine 1mg/kg IVP/IO

**Note: Consider common causes of tachycardia, including hypovolemia, and sepsis. SVT usually occurs in younger patients (i.e., younger than 50 years) with HRs greater than 200 bpm. Confirm a wide complex tachycardia using multiple leads. Consult the Base Station if you are unclear about the cause of the dysrhythmia, and whether or not you should treat it. Whenever possible, contact Base Station prior to administering synchronized cardioversion in unstable but conscious patients. In the unstable, unconscious patient where rapid synchronized cardioversion is the highest priority, do not hesitate administering cardioversion before initiating transport and contacting the Base Station (see E. 3).**

\*\*Unconsciousness should be attributed to a lack of perfusion caused by the tachycardia itself, not due to some other etiology unrelated to the tachycardia.