



# MIAMI TOWNSHIP FIRE & EMS CLERMONT COUNTY, OHIO *CARDIAC ARRHYTHMIA PROTOCOLS*

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## UNSTABLE TACHYCARDIA

### Historical Findings

1. Age > 15.

### Physical Findings

1. **SIGNS** of rate-related cardiovascular compromise:
  - A. Acute altered mental status.
  - B. Ongoing chest pain.
  - C. Severe shortness of breath.
  - D. Presyncope or syncope.
  - E. Systolic blood pressure  $\leq 90$  mm/Hg.

### EKG Findings

1. Rate above 130 beats/minute.
2. Rhythm may be supraventricular or ventricular in origin.
3. Absent P waves.

### Protocol

1. Initiate contact; reassure, and explain procedures.
2. Assess and secure the patient's airway and provide oxygen per the airway, oxygen and ventilation protocol.
3. Perform patient assessment, obtain vital signs and begin cardiac monitoring.
4. Acquire a 12 Lead ECG if time permits, and maintain cardiac monitoring at all times.
5. Initiate IV access with a saline lock or 0.9 % normal saline KVO if time permits.



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6. Patient may be sedated with midazolam (Versed) 1 mg IV/IO titrated up to a max dose of 5 mg or 5 mg IM/IN if time permits. Systolic blood pressure of 100 mm Hg is not required for sedation in unstable tachycardia patients because hypotension is typically related to impaired ventricular filling as a result of the rapid tachycardia.
7. Perform synchronized cardioversion at 100 joules monophasic **OR** biphasic.
8. If unstable tachycardia persists, repeat synchronized cardioversion at 200 joules monophasic **OR** 120 joules biphasic.
9. If unstable tachycardia persists, repeat synchronized cardioversion at 300 joules monophasic **OR** 150 joules biphasic.
10. If the unstable tachycardia persists after synchronized cardioversion administer amiodarone (Cordarone) 150 mg IV/IO. Base the rate of administration on the stability of the patient. If the patient is still conscious and alert, administer it slow over 10 minutes by mixing 150 mg/3 cc in a 20 cc syringe with 17 cc 0.9 % normal saline. If the patient is unconscious administer it bolus and prepare for unsynchronized defibrillation at 360 joules monophasic **OR** 200 joule biphasic.
11. If patient has a known allergy to amiodarone (Cordarone), administer lidocaine (Xylocaine) 1.5 mg/kg IV/IO repeated in 3-5 minutes at 0.5 to 0.75 mg/kg to a max dose of 3 mg/kg instead of amiodarone (Cordarone).
12. If the patient has a known allergy to amiodarone (Cordarone), lidocaine (Xylocaine) 0.5 mg/kg slow IV can be administered for breakthrough ventricular arrhythmias not to exceed the max dose of 3 mg/kg instead of an amiodarone (Cordarone).