

Subject: Treatment Guidelines – ALS
Tachyarrhythmia with a Pulse

Associated Policies:

I. Priorities:

- A. ABC's. Maintain oxygen saturation greater than 94%.
- B. Treat cardiac arrest per Policy #6504.
- C. Attempt to identify the rhythm and degree of distress.
- D. If the rhythm is sinus tachycardia, sections II and II do not apply. Identify and treat the underlying cause per the appropriate protocol.
- E. Do not delay treatment in the unstable patient. Signs of instability include rate-induced hypotension or signs of acute end organ damage (altered mental status, ischemic chest discomfort, acute heart failure, shortness of breath etc.).
- F. Obtain 12 Lead ECG for diagnostics if available.
- G. Re-assess rhythm and vital signs frequently.

II. Tachyarrhythmia with a pulse UNSTABLE:

- A. Immediate synchronized cardioversion (see special information below for dosing)
- B. Consider sedation if time and blood pressure allow per benzodiazepine Policy # 5332 (midazolam preferred if available).
- C. Consider pain control with fentanyl per policy #5422
- D. If rhythm remains unchanged
 - 1. Administer an antiarrhythmic if IV/IO access is available.
 - a. Amiodarone per Policy # 5439
 - b. Or lidocaine per Policy # 5309 (for ventricular tachycardia only)
 - 2. Repeat synchronized cardioversion attempt at a higher dose.
- E. If rhythm is polymorphic ventricular tachycardia (Torsades de pointes)
 - 1. Administer Magnesium Sulfate per Policy # 5428.
 - 2. Defibrillate (not synchronized) at 200 J
- F. Consider 12 lead ECG if available and it does not delay transport.

III. Stable tachyarrhythmia

- A. Measure QRS width (narrow is <0.12 sec, wide is >0.12 sec), determine if regular or irregular, and try and identify P waves to help determine rhythm.
 - 1. Start IV. Apply pacer pads to patient.
 - 2. Obtain 12 lead if available to assist with rhythm identification.
- B. Suspected atrial fibrillation or atrial flutter.
 - 1. Monitor for signs of instability and transport.
- C. Suspected ventricular tachycardia.
 - 1. Administer an antiarrhythmic if no contraindications.
 - a. Amiodarone per Policy # 5439
 - Or
 - b. Lidocaine per Policy # 5309
- D. Suspected paroxysmal supraventricular tachycardia (SVT)
 - 1. Vagal maneuvers per Policy # 5418.

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- 2. Administer Adenosine per Policy # 5427
- E. If patient becomes unstable refer to the Unstable tachyarrhythmia (Section II above) and proceed with immediate synchronized cardioversion (see special information)

VI. Special Information:

- A. Synchronized Cardioversion Doses (Follow the specific device's recommended energy level to maximize first shock success.
 - 1. Adult:
 - a. 100 J for first attempt increase to 200 J for subsequent - biphasic.
 - b. 200 J Monophasic
 - c. Wide irregular: defibrillation dose
 - 2. Pediatric: 0.5 J/kg first attempt increase to 2 J/kg for subsequent attempts.
- B. Print or record rhythm strip prior to treatment if possible or if the rhythm changes.