


Section: **Adult Medical**  
Subject: **CARDIAC DYSRHYTHMIAS – ATRIAL FIBRILLATION/ATRIAL FLUTTER**  
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1. Basic ALS Treatment.
  - a. Must evaluate patients' pulse for 60 seconds.
  - b. **Do NOT use the EKG heart rate displayed on monitor for calculation of pulse.**
2. Specific ALS Treatment
  - a. Stable patients with signs of rapid ventricular response (RVR) and heart rate sustained >150/minute
    - i. **Diltiazem**
      1. 0.25 mg/kg IV over 2 minutes.
      2. Systolic blood pressure must be > 100 mmHg.
      3. May repeat once after 15 minutes at 0.35 mg/kg IV over 2 minutes.
  - b. Stable patients without signs of RVR:
    - i. Monitor and apply general supportive care.
  - c. Unstable patients
    - i. At the discretion of the paramedic in charge you may elect to try one round of pharmacological intervention before cardioversion.
    - ii. Perform immediate synchronized cardioversion.
      1. Energy levels sequence for SVT and Atrial flutter 50j, 100j, 200j, 300j, and 360j.
      2. Energy levels sequence for Atrial Fibrillation 125j, 200j, 300j, and 360j
    - iii. If the systolic blood pressure is > 100 mmHg:
      1. Sedation: **Midazolam** 1.25 mg IV once.
      2. Analgesia: **Fentanyl** 50 mcg IV once.
3. QA Points:
  - a. **Unstable condition must be related to the tachycardia.**
    - i. Signs and symptoms may include chest pain, shortness of breath, decreased level of consciousness, low blood pressure, shock, pulmonary congestion, CHF, or acute MI.
  - b. Immediate cardioversion is seldom needed for heart rates < 150 bpm.
  - c. If delays in synchronization occur and clinical conditions are critical, switch to immediate unsynchronized cardioversion.
  - b. Atrial flutter often responds to lower energy levels, therefore that is why you start at 50 j.