



Atrial Fibrillation

Adult Medical

Austin County
EMS Protocol & Guideline

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Overview: Atrial fibrillation is the chaotic firing of multiple electrical foci in the atria, and can only be confirmed by ECG monitoring. Atrial Flutter is the Supraventricular rhythm with flutter waves (best seen in leads II, III), and normally associated with organic heart disease. Both focus on perfusion, oxygenation, and finding the underlying etiology. Treatment of these rhythms should be reserved for patients with ventricular rates greater than 140 with signs and symptoms

EMT

- Airway/Oxygen appropriate for condition
- Acquire 12 lead
- Suspect in patients with irregular pulses – Palpate pulses bilaterally
- Determine time of onset
- Obtain **BGL**

AEMT

- Establish IV of Normal Saline
- **Ondansetron** 4 mg or **Diphenhydramine** 12.5 – 25 mg IVP for nausea and vomiting (half dose in elderly)

Paramedic

Stable

- **Diltiazem** 0.25 mg/kg IVP, Max dose of 25 mg – Onset of symptoms within 24 hrs - May repeat at 0.35 mg/kg if refractory
- **Amiodarone** 150 mg IVP, may repeat once after 10 mins if needed. *****Diltiazem & Amio can be given in 100 NS bag / drip*****

Unstable

- **Midazolam** - 2 mg IVP or IN for patients with a systolic > 90mmHg.
 - **Fentanyl** - 2 mcg/kg for patients with a systolic pressure < 90mmHg
- or
- **Ketamine** 0.5 mg IV or 1 mg/kg IM
 - **Synchronized Cardioversion** beginning at 50j. Repeat at 100j, 200j, 300j and 360j as needed
 - **Diltiazem** 0.25 mg/kg IVP, Max dose of 25 mgs – Onset of symptoms within 24 hrs
 - **Amiodarone** 150 mg IVP, may repeat once after 10 mins if needed

Any cardioversion over 200j must have pain medication prior to cardioverting

If patient is hypotensive prior to Diltiazem administer Calcium Chloride 500 – 1000 mg or 4 mg/kg IV prior to Diltiazem
If patient becomes hypotensive post Diltiazem administer Calcium Chloride 500 – 1000 mg or 4 mg/kg IV

PEARLS

- Always look for the underlining causes, the 12 lead ECG, and the patient's respiratory process can reveal possible causes.
- The success of Cardioversion is based on the atrial size and the duration of the Afib.
- Conversion of Afib of unknown duration, or duration >12 hours should be limited to the unstable patient. The risk of a blood clot forming in the atria during this time is high, blood thinners need to be administered prior to conversion.
- **Continuous ECG, pulse oximetry ETCO2, and blood pressure monitoring are mandatory, during, and, after the administration of any of the above medications**