**TICU Atrial Fibrillation Treatment Algorithm**

1. Confirm on more than one lead of ECG
   - Check electrolytes (with Mg, Ca, Phos)
   - Check CBC
   - Assess patient’s volume and oxygenation status

2. **Rapid ventricular response**
   - Hemodynamically stable → rate control
   - Magnesium 4 gm IV

3. **Hemodynamically unstable**
   - Direct cardioversion
     - Synchronized at 50J, 100J, 200J (consider sedative)
     - Consider Magnesium 4gm IV

4. **NO rapid ventricular response**
   - No acute intervention required

**Option in severe COPD or asthma**
- (avoid if EF <40%): Diltiazem 0.25mg/kg IVP X 1. If no response, consider 0.35mg/kg IVP X 1. If no response, consider drip @ 5-15mg/hr

5. Metoprolol^ 5-10 mg IV q5min X 3 doses

6. Amiodarone 150mg IV bolus → 24 drip (1mg/min X 6hrs, followed by 0.5mg/min X 18h)

**Consider cause of atrial fibrillation (fluid overload, infection, post-op, etc) if no prior history**

*Algorithm should be re-assessed after 24hrs. Consider oral therapy

*Anticoagulation to be discussed and documented if persistent >48hrs

*Titrate to at least <120BMP (<100 preferred if hemodynamics allow).

*Obtain labs, CXR, pulse oximetry/ABG.

^ If unsuccessful with metoprolol, please proceed with alternative regimen

*Preferred*

---

Updated December 2019
Reviewed: Jan 2022
Leanne Atchison, PharmD
Jennifer Beavers, PharmD, BCPS
Diana Williams, AGACNP-BC