

Pharmacologic Options for Stable Atrial Fibrillation

Rate Control Medications¹:

- Beta Blockers:
 - Considered first line²
 - Metoprolol 2.5-5 mg IV bolus, up to 3 doses
 - Esmolol 0.25-0.5 mg/kg IV bolus, then 50-300 mcg/kg/min infusion
 - Precautions:
 - Caution in bronchospastic disease or severe COPD
 - Hypotension with MAP < 65
- Nondihydropyridine Calcium Channel Blockers:
 - First line in patients with severe COPD or active bronchospasm²
 - Diltiazem 0.25mg/kg IV bolus, then 5-15mg/hr infusion
 - Contraindications:
 - Decompensated heart failure
- Amiodarone:
 - Can be used for rate and rhythm control when beta-blockers and calcium channel blockers have failed, or the patient has a contraindication to beta-blockers and calcium channel blockers^{1,2}
 - 150mg bolus over 30 min, then an infusion at 1mg/min for 6 hours followed by 0.5mg/min infusion for 18 hours
 - Max loading dose is 10 grams
 - Transition to oral amiodarone
 - Indications: history of afib or ≥2 failed attempts to wean from IV amiodarone
 - ≤ 24hours on IV amiodarone: start 200-400mg po Q12h
 - ≥ 48hours on IV amiodarone: start 200mg po q12h
 - Decrease the dose by half once a week until a maintenance dose of 200mg po once daily
 - Precautions:
 - Underlying lung disease
 - Hepatic impairment (liver transplant patients)

Goal Heart Rate¹:

- A lenient rate-control strategy (resting heart rate <120 bpm) may be reasonable when patients remain asymptomatic and LV systolic function is preserved.
- A heart rate control (resting heart rate <80 bpm) strategy is reasonable for symptomatic management of AF.

References:

1. January CT et al. 2014 AHA/ACC/HRS Atrial Fibrillation guideline for the management of patients with atrial fibrillation: executive summary: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines and the Heart Rhythm Society. *J Am Coll Cardiol* 2014;64:2246–80.

2. Fernando HC et al. The society of thoracic surgeons practice guideline on the prophylaxis and management of atrial fibrillation associated with general thoracic surgery. *Ann Thorac Surg* 2011;92:1144–52.