

Atrial Fibrillation – Rate Control Drugs

Metoprolol IV Dosing

5 mg over 2 mins, every 5 mins for up to total 15 mg

Metoprolol IV Conversion to PO dosing

Can start 1st oral dose **within 20 mins** of initial IV to estimate dosing needs.

- Total 5 mg IV→ start 12.5 mg PO Q6H
- Total 10 mg IV→ start 2 5mg PO Q6H
- ullet Total 15 mg IV \rightarrow start 37.5 mg PO Q6H

Up-titrate PO dose if HR>110 after 2 hours from 1st oral dose

- 12.5 mg PO Q6H → 25 mg PO Q6H
- on 25 mg PO Q6H→ 37.5 mg PO Q6H
- on 37.5 mg PO Q6H \rightarrow 50 mg PO Q6H

If at 50mg q6 and HR >110, consider adding diltiazem.

Metoprolol – Key Points to Remember for Management in Outpatient Setting

- Metoprolol is 1st line for AV nodal blocking therapy unless prior intolerance or severe asthma
- Initial dosing: Metoprolol tartrate 25 mg PO twice daily (or succinate 50 mg daily)
- If already taking metoprolol, add suggested initial dosing amount to patient's total daily dose, up to a maximum of 200 mg/day; if patient already taking 200 mg/day metoprolol, add diltiazem
- Titrate accordingly for goal heart rate average < 80 bpm in AFIB and sinus rhythm > 50

Calcium Channel Blockers

DO NOT USE diltiazem or verapamil if EF <40%

Diltiazem IV Dosing

0.25mg/kg (Max dose: 25mg) IV bolus x1. Start drip at 5mg/hr. Consider addition 30mg PO IR Diltiazem q6 hours or home dose to reduce need for drip. Drip can be titrated to 15mg/hr, with re-bolus of 0.25mg/kg with each increase.

IV to PO diltiazem: Oral dose = (IV drip rate [in mg/hr] x 3 + 3) x10

Steps to covert from diltiazem IV to PO

- 1. Calculate total daily oral dose
- Round dose to a 30 mg increment, divide this daily dose by 4 to give Q6H dosing
- 3. Give first PO dose 1 hour prior to titrating drip
- 4. One hour after PO dose, titrate drip down by 2.5 mg/hr until drip is running at 0 mg/hour

Std rates for diltiazem generally convert as follows:

- 3 mg/hour = 120 mg/day
- 5 mg/hr = 180 mg/day
- 7.5 mg/hr = 260 mg/day
- 10 mg/hr = 330 mg/day
- 15 mg/hr = 480 mg/day

Verapamil IV Dosing

0.1mg/kg bolus (Max dose: 10mg) IV bolus x 1. Start drip at 5mg/hr and titrate to goal heart rate (Max 20mg/hr) with re-bolus of 0.1mg/kg with each increase.

Verapamil PO Dosing

240 - 320 mg daily. Divide over 3-4 doses if short acting (Q6H) Once daily if extended release (ER)

Amiodarone IV Dosing

150mg bolus then 1mg/minute x 6 hours and 0.5mg/minute x 18 hours

If rates >110 after 1 hour optional 2nd 150mg IV bolus and continue 1mg/minute gtt.

Amiodarone PO dosing in hospital

After converts to NSR or after 24 hrs, 400mg PO BID up to 10g load (includes IV), then 200mg daily. **Upon discharge**: 200 mg daily for 1-3 months. Decrease in-hospital dose by 50% if sinus <50 bpm; d/c if sinus <40 bpm or symptoms. *Depending on clinical situation and duration of AF, outpatient amiodarone may not be warranted.*

Full guideline: Atrial Fibrillation: Management - Adult - Inpatient/Ambulatory/Emergency Department