

Dear Emergency Room Physician,

This patient has paroxysmal, non-valvular atrial fibrillation. I have evaluated them for contraindications FLECAINIDE "Pill-in-Pocket" strategy and they had none. Those contraindications include the following:

- advanced atrioventricular or infranodal conduction disease
- marked sinus bradycardia
- ischemic heart disease (active ischemia or history of MI)
- clinical heart failure or LVEF $\leq 40\%$
- Brugada syndrome
- LVH (ECG or echo) with repolarization abnormality (ECG)

After counselling, the patient has agreed to trial of "Pill-in-Pocket" approach to cardioversion with FLECAINIDE. **The patient requires the first dose of FLECAINIDE to be administered under supervision with telemetry. See table on next page for dosing and monitoring.**

IMPORTANT: Before proceeding with this strategy, you must determine if the patient is appropriate for acute rhythm control strategy based on anticoagulation status.

If the patient is anticoagulated and has not missed any doses of anticoagulation x 3 weeks, then they are appropriate for acute rhythm control strategy. If the patient is not anticoagulated or has missed doses of anticoagulation in the last three weeks, you can proceed with acute rhythm control strategy only if:

- < 12 hr of atrial fibrillation and no CVA in last 3 months (irrespective of CHADS2-65 score), or
- 12-48 hr of atrial fibrillation and CHADS2-65 is 0-1

Please read the instructions on the next page from the 2020 Canadian Cardiovascular Society Guidelines for the Management of Atrial Fibrillation regarding dosing, duration of monitoring, determinants of treatment failure, and instructions for subsequent use.

Sincerely,

Vesna Mihajlovic, MD FRCPC (CPSO 111493 Cardiologist)

Supplemental Table S12. "Pill-In-The-Pocket" Antiarrhythmic Drug Therapy.

Appropriate Candidates	1) symptomatic patients with sustained AF episodes (e.g. ≥ 2 hours) that occur less frequently than monthly 2) absence of severe or disabling symptoms during an AF episode (e.g. fainting, severe chest pain, or breathlessness) 3) ability to comply with instructions, and proper medication use
Contraindication to PIP	1) significant structural heart disease (e.g. LVEF $< 50\%$, active ischemic heart disease, severe left ventricular hypertrophy) 2) abnormal conduction parameters (e.g. QRS duration > 120 msec, PR interval > 200 msec; or evidence of pre-excitation) 3) sinus node dysfunction or advanced AV block 4) hypotension (systolic BP < 100 mmHg) 5) prior intolerance to any of the "pill-in-the-pocket" medications
PIP Administration	Immediate release oral AV nodal blocker (one of diltiazem 60 mg, verapamil 80 mg, or metoprolol tartrate 25 mg) 30 minutes prior to the administration of a class Ic antiarrhythmic (300 mg of flecainide or 600 mg of propafenone if ≥ 70 kg; 200 mg of flecainide or 450 mg of propafenone if < 70 kg)
Mandatory monitoring for initial administration	Telemetry for at least 6 hours Blood pressure monitoring every 30 minutes 12-lead ECG monitoring every 2 hours
Determinants of initial treatment failure	1) AF persistence > 6 hours after "pill-in-the-pocket" administration or electrical cardioversion required for termination 2) Adverse events including: • symptomatic hypotension (systolic BP ≤ 90 mmHg) • symptomatic conversion pauses (> 5 seconds) • symptomatic bradycardia after sinus rhythm restoration • pro-arrhythmia (conversion to AFL/tachycardia, or episodes of ventricular tachycardia) • severe symptoms (dyspnea, presyncope, syncope) • $> 50\%$ increase in QRS interval duration from baseline.
Instructions for subsequent administration after initial successful use	Patients should take the AV nodal agent 30 minutes after arrhythmia onset, then the Class Ic antiarrhythmic drug 30 minutes following the AV nodal agent. Following antiarrhythmic drug administration patients should rest in a supine or seated position for the next 4 hours, or until the episode resolves. Patients should present to the emergency department in the event that: 1) the AF episode did not terminate within 6-8 hours 2) they felt unwell after taking the medication at home (e.g. a subjective worsening of the arrhythmia following antiarrhythmic drug ingestion) 3) more than one episode occurred in a 24-hour period (patients are advised not to take a second "pill-in-the-pocket" dose within 24 hours) 4) if the AF episode was associated with severe symptoms (e.g. significant dyspnea, chest pain, pre-syncope, or symptoms of stroke), even in the absence of "pill-in-the-pocket" use.

Legend: AF, atrial fibrillation; AFL, atrial flutter; AV, atrioventricular; BP, blood pressure; ECG, electrocardiogram; kg, kilogram; LVEF, left ventricular ejection fraction; msec, milliseconds; PIP, Pill-in-the-pocket.

IMPORTANT: After successful chemical/electrical cardioversion, ALL patients require 4 weeks of anticoagulation. Long-term anticoagulation is determined per CHADS2-65 score.