The Antiarrhythmic Properties of Ranolazine- Is There a Role in the Prevention of Post-CABG AF?

Mikhael F. El-Chami*
Division of Cardiology-Section of Electrophysiology, Emory University, USA

Atrial Fibrillation (AF) occurs in 20%-30% of patients after coronary artery bypass (CABG) [1,2] and in 40%-50% of patients after valve surgery and in 60% of patients after combined CABG and valve surgery [3]. AF after cardiac surgery (POAF) is associated with prolonged hospital stay and increased morbidity and mortality [4,5]. Therefore preventing POAF might improve the outcomes of patients undergoing CABG and reduce their hospital-stay. Beta-blockers are indicated for all patients undergoing CABG and they do reduce the incidence of POAF [6]. Amiodarone and sotalol will provide additional benefit on top of beta-blockers and help prevent POAF [6,7]. However, their use is not devoid of problems. For instance, amiodarone has to be stopped in 6% of patients in the post-operative setting because of bradycardia requiring temporary pacing [6]. Also, sotalol use carries an increased risk of proarrhythmia and bradyarrhythmia in this setting [6,8]. Therefore, the guidelines recommend the use of amiodarone for the prevention of POAF only in patients at high-risk of developing POAF [8]. The recommendation also states that amiodarone need to be started prior to surgery especially CABG for the prevention of POAF. A new retrospective study also showed that Ranolazine used as a “pill-in-the-pocket” approach converted 72% of all patients with new-onset atrial fibrillation to sinus rhythm. An efficacy that is comparable to Class IC antiarrhythmic drugs. A new prospective study also showed that Ranolazine as compared to Amiodarone was associated with lower incidence of post-CABG AF [11]. The safety and antiarrhythmic properties of ranolazine makes it a perfect drug to use prior to cardiac surgery especially CABG for the prevention of POAF. Prospective randomized trials are needed to answer this important question.

REFERENCES


