Postoperative oral amiodarone versus oral bisoprolol as prophylaxis against atrial fibrillation after coronary artery bypass graft surgery: a prospective randomized trial.


Source

Department of Cardiovascular Surgery, Hotel Dieu de France Hospital, Beirut, Lebanon. sanasl@inco.com.lb

Abstract

BACKGROUND:

Postoperative atrial fibrillation (AF) occurs in up to 50% of patients undergoing coronary artery bypass (CABG) surgery and is associated with complications. Amiodarone and beta blockers are effective as prophylaxis for AF after CABG. The purpose of this study was to compare oral amiodarone versus oral bisoprolol for prevention of AF after CABG.

METHODS:

In this randomized study, 200 patients admitted for elective CABG were given oral amiodarone (n=98 patients) or oral bisoprolol (n=102 patients) beginning 6 h after surgery. Amiodarone patients received 15 mg/Kg then 7 mg/Kg/day for one month. Bisoprolol patients received 2.5 mg then 2.5 mg bid.

RESULTS:

Postoperative AF occurred in 15.3% of the patients in the amiodarone group and 12.7% of the patients in the bisoprolol group (p=0.60). Maximal ventricular rate tended to be lower in the bisoprolol group (125+/−6 beats/min) compared with the amiodarone group (144+/−7 beats/min, p=.06). Preoperative beta blockage did not affect AF incidence in either study group. There was no difference between the 2 groups for the onset time of AF episodes, total AF duration, AF recurrence and postoperative length of hospital stay. No serious postoperative complications occurred in the two study groups. Two reversible low cardiac output cases occurred with bisoprolol.

CONCLUSIONS:

Postoperative oral bisoprolol and amiodarone are equally effective for prophylaxis of AF after CABG. Treatment with bisoprolol resulted in a trend to lower ventricular response rate in AF cases. Both regimens were well tolerated.