

 MYOCARDIAL ISCHEMIA AND INFARCTION

COMBINED CLOPIDOGREL AND ASPIRIN TREATMENT UP TO SURGERY INCREASES THE RISK OF POSTOPERATIVE MYOCARDIAL INFARCTION, BLEEDING AND REOPERATION IN PATIENTS UNDERGOING CORONARY ARTERY BYPASS GRAFTING

ACC Oral Contributions

Georgia World Congress Center, Room B404

Tuesday, March 16, 2010, 2:45 p.m.-3:00 p.m.

Session Title: Coronary Artery Bypass Surgery: Contemporary Issues in Graft Survival and Patient Outcomes

Abstract Category: Coronary Artery Bypass Surgery/Innovative Techniques

Presentation Number: 0924-06

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Background: Recent guidelines suggest that patients undergoing coronary artery bypass grafting (CABG) should discontinue clopidogrel and aspirin (ASA) respectively 5 and 2-10 days before surgery in order to reduce postoperative bleeding and its complications. The aim of our study was to evaluate the relation between timing of discontinuing clopidogrel in combination with ASA and early clinical outcomes in patients undergoing CABG.

Methods: This was a retrospective, observational, cohort study of prospectively collected data on 4,330 consecutive patients undergoing isolated CABG from April 2004 to February 2009. Of these, 926 patients were receiving double antiplatelet therapy in the 14 days prior to surgery. Patients were stratified into three groups: clopidogrel+ASA within 5 and 2 days respectively before surgery (group A, n=287); clopidogrel within 5 days before surgery +ASA stopped 2-10 days before surgery or clopidogrel stopped 5 days prior to surgery + ASA within 2 days of surgery (group B, n=308) and clopidogrel+ASA discontinued more than 5 and 10 days respectively before surgery (control group, n=331).

Results: Overall mortality was 0.8%. The incidence of postoperative myocardial infarction (MI) was 5.2%, 1%, 1.8%, in group A, B and control respectively ($p=0.003$). Reoperation for bleeding occurred in 4.5%, 2.9% and 1.2% ($p=0.04$) and total chest drainage was 761 ± 473 ml, 720 ± 421 ml and 687 ± 302 ml in group A, B and control respectively ($p=0.39$). Multivariate analysis revealed that group A was an independent predictor of postoperative MI (OR 2.81, 95% CI 1.1-7.4), reoperation for bleeding (OR 3.98, 95% CI 1.28-12.37, $p=0.017$) and blood losses ($\chi^2=0.07$, $p=0.035$).

Conclusion: Clopidogrel in combination with aspirin up to surgery is associated with an increased risk of postoperative MI, bleeding and reoperation in patients undergoing CABG.