

surgery had a reduced risk of POAF. Numerous clinical studies and meta-analyses have demonstrated that statin therapy before noncardiac and cardiac surgery can limit periprocedural myocardial damage (Winchester DE., et al 2010). Our results could not provide the evidence for statins against POAF as most of our patient were prophylactically treated with statin. However, a properly designed randomized trial should be undertaken to clarify the issue.

Limitations of the study

- * The population of this study was highly selected. Inherent selection bias could limit generalization of the results to all patients undergoing off pump CABG.
- * Moreover, the number of patients enrolled is small.
- * Cardiac surgeons and practitioners in the ICU were not blinded to echocardiography results, thus bias could arise from potential differences in drug treatment according to presence or absence of echocardiographic evidence of LA enlargement.
- * As with all similar studies, one limitation of the present study is the method used to record arrhythmias. We continuously monitored rhythm of the patients for 72 hours and recorded 12-lead ECG. Our AF prevalence of 28% is within the 25% to 30% range reported in the majority of such study (Zaman., et al 2000).
- * Finally, we measured LAV by 2-D echocardiography and Simpson's rule. It is possible that assessing LAV by other techniques such as three-dimensional echocardiography could further improve the clinical performance of LAV to predict POAF.

5. Conclusion:

The study demonstrated that along with advanced age, Euroscore, serum creatine and postoperative blood transfusion, preoperative left atrial echocardiographic parameters are correlated with POAF after isolated off-pump CABG.

Among the atrial parameters LAV measured by 2-D echocardiography is positively and independently associated with the occurrence of POAF after off-pump CABG.

Recommendation

- ? Identifying and targeting the patients at risk of POAF after off pump CABG with aggressive prophylactic

measures may lead to reduce patient's morbidity and can lead to major cost savings

* Measurement of LA volume is a simple and important tool for risk stratification and as a guide for surveillance and therapy in patients with coronary artery disease.

* Assessing LAV by other than Simpson's rule and 2D echocardiography such as three dimensional echocardiography could further improve the clinical performance.

* Continuous telemetry recording of patient's ECG is recommended to detect POAF.

* Further large scale study should be undertaken to determine if pretreatment with antiarrhythmics in CABG patients with large left atrial volumes will reduce the incidence of POAF.

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