

Atrial Fibrillation Following Coronary Artery Bypass Graft Surgery is Strongly Correlated with Long-Term Atrial Fibrillation and Stroke

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Introduction:

Atrial fibrillation (AF) is a common complication of coronary artery bypass graft (CABG) surgery, occurring in 10 to 40 percent of patients, mostly during the first week post-surgery. It is associated with increased risk of stroke, prolongation of hospital stay and increased mortality. Data regarding the correlation between in-hospital and long term AF is scarce.

Objective:

The primary objective of the current study was to assess the correlation between in-hospital AF following CABG and long-term AF. The secondary endpoint was to investigate the correlation between in-hospital AF post CABG and cerebrovascular accident (CVA) or death.

Methods:

Retrospective analysis of 140 consecutive patients who underwent isolated CABG surgery in Soroka medical center between the years 2002-2003 was performed.

Results:

Mean age was 73 years, and majority was male (75%). Approximately half of the patients experienced prior myocardial infarction (47%), and 15% had significant left ventricular dysfunction of less than 40%. Risk factors included: hypertension (75%), dyslipidemia (89%), diabetes mellitus (40%), smoking history (31%), and peripheral vascular disease (14%). Most subjects received beta blockers and statins (84% and 88%, respectively). In-hospital AF developed in 31% of patients and was strongly correlated with late AF (OR: 6.3, 95% CI: 2.4-16.2, P<0.001), and CVA (OR: 4.7, 95% CI: 1.35-15.0, P=0.05), but was not related to death during mean follow-up of 8.3 years.

Conclusions:

New onset AF post CABG is a common complication which is strongly correlated with late AF and stroke. Patients should be closely monitored to facilitate early administration of anticoagulant therapy in high risk patients with recurrent of AF.