

#16 PERI-OPERATIVE CARDIAC FACTORS BUT NOT CORONARY REVASCLARIZATION STATUS PREDICT LONG-TERM SURVIVAL AFTER PERIPHERAL VASCULAR SURGERY

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Purpose : We sought to identify specific determinants of long-term cardiac events and survival in patients having major arterial operations after preoperative cardiac risk stratification by American College of Cardiology/ American Heart Association (ACC/AHA) guidelines.

Methods : 459 consecutive patients underwent risk stratification (high, intermediate, low) prior to elective or urgent (<24 hr from presentation) cerebrovascular, aortic, or infrainguinal reconstructions between 8/96 and 1/2000. Long-term follow-up (mean 43 ± 11 mo) was possible in 97 % of patients with Kaplan-Meier estimates used for survival. Long-term prognostic variables were identified by multivariate Cox proportional hazards methods and contingency table analyses censoring early (<30 day) peri-operative deaths.

Results : While 5-yr survival was 72 % for the overall cohort, cardiac causes accounted for only 22 % of all deaths and the incidence of new cardiac events (MI, CHF, arrhythmia, new CABG or PTCA) during follow-up was only 6 % / patient / yr. High cardiac risk stratification level (hazard ratio[HR] 2.2) and adverse peri-operative cardiac events (MI, CHF, ventricular arrhythmia)(HR 2.2) were independent predictors of long-term mortality, however. Preoperative cardiac risk levels also positively correlated with new cardiac event rates (P<.01) and long-term cardiac mortality (P=.02). Coronary revascularization status (CABG/PTCA done < or > 5 yr prior to vascular surgery) did not significantly influence overall survival. No difference (P=.1) in death rates were observed between patients undergoing CABG or PTCA before or after vascular operations and those avoiding coronary revascularization, although long-term cardiac deaths were most common after remote (>5 yr) prior CABG/PTCA (P<.01). Type of operation, urgency, and non-cardiac complications did not impact long-term survival.

Conclusion : Despite cardiac events being a less common cause of late mortality after vascular surgery, peri-operative cardiac factors do determine overall patient longevity. Coronary revascularization done before or after peripheral arterial reconstruction does not appear to improve long-term survival.