**REVASCULARIZATION WITH PERCUTANEOUS TECHNIQUES OR SURGERY IS ASSOCIATED WITH IMPROVED IN-HOSPITAL SURVIVAL IN ELDERLY PATIENTS HOSPITALIZED WITH ACUTE MYOCARDIAL INFARCTION**

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Background: In-Hospital mortality from acute myocardial infarction (AMI) remains high among the elderly. It is uncertain whether use of revascularization, despite higher complication rate, improves survival in this age group.

Methods: We compared the rates of cardiac catheterization and revascularization for 470 patients over 65 years of age (308 men and 162 women) with 568 patients under 65 years of age (416 men and 152 women) hospitalized with acute myocardial infarction.

Results: The rate of catheterization and revascularization declined with age (p<0.01). Among the 470 patients over 65 who underwent catheterization, 286 (61%) were referred for revascularization (204 angioplasty, 82 surgery) as compared with 366 (65%) younger patients. Age, female gender, elevated left ventricular (LV) end-diastolic pressure, and co-morbidities were inversely associated with referral for revascularization. Overall in-hospital survival was 82% (84% for men, and 79% for women). Significant univariate predictors of survival included revascularization, LV ejection fraction and cardiac output; age, number of diseased vessels, systolic blood pressure <90 mm Hg at presentation, LV end-diastolic pressure, prior myocardial infarction and co-morbidities were inversely associated with survival. Revascularization (p<0.001) and ejection fraction (p<0.01) showed the strongest association with survival; Age (p<0.05) and initial systolic blood pressure <90 mm Hg (p<0.05) were inversely related to survival. Angioplasty and bypass surgery were each associated with improved survival.

Conclusions: Elderly patients hospitalized with acute myocardial infarction undergo invasive cardiovascular procedures less frequently than younger patients. Among patients over 65 years of age who undergo catheterization, the most important predictor of survival is revascularization.