

ABSTRACT NO. 37

DOES THE USE OF BILATERAL INTERNAL MAMMARY ARTERY IMPACT SURVIVAL OF VETERANS UNDERGOING CORONARY ARTERY BYPASS SURGERY?

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BACKGROUND: There is recent evidence for the superiority of bilateral internal mammary artery (BIMA) grafts over single left internal mammary artery (LIMA) grafts in coronary artery bypass grafting (CABG) operations. The purpose of this study was to compare the long-term survival of veterans undergoing CABG with BIMA and LIMA grafts.

METHODS: A review of our prospectively collected database identified all patients (N=784) who underwent primary isolated CABG at our institution from December 1991 through December 1998. Grafting with LIMA and BIMA was performed in 713 (90.9%) and 71 (9.1%) patients, respectively. We identified 66 propensity-matched pairs. Hazard functions were computed to identify risk factors for mortality and to compare survival.

RESULTS: The matched cohort was all male, with a mean age of 56 +/- 8 years. The mean follow-up was 9.7 +/- 3.8 years. Comparing matched patients showed no significant survival benefit for the BIMA group versus the LIMA group at 5 years (89% versus 86%) and 10 years (73% versus 69%) (P=0.88). Factors associated with decreased survival were advanced age, NYHA heart failure class, and diabetes.

CONCLUSION: Using BIMA grafting instead of LIMA grafting had no significant survival benefit for male veterans. Further study is needed to fully evaluate the role of BIMA grafting in this unique patient population.