

**Late outcome of bilateral ITA grafting for patients with acute MI**

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**Objective:** Primary balloon angioplasty is currently the preferred method of myocardial revascularization in patients with acute myocardial infarction (AMI). However, a decade ago, many AMI patients underwent intravenous thrombolytic therapy and some of them were referred to surgical myocardial revascularization without or after lytic therapy. The purpose of this report is to describe long-term outcome of AMI patients who underwent myocardial revascularization with bilateral internal thoracic arteries (ITAs).

**Methods:** Between 1996 and 2001, 346 consecutive AMI patients underwent skeletonized bilateral ITA grafting. Of the 276 male and 69 female patients, 130 (37.6%) were >70 years of age, 102 (29.5%) had congestive heart failure, 50 (14.5%) had EF <35%, 92 (26.6%) had left main disease and 78 (22.5%) were emergency cases.

**Results:** Operative mortality was 5.2%. Early postoperative morbidity included: sternal infection (2.3%), cerebrovascular accident (3.5%) and perioperative myocardial infarction (2%). Multiple regression analysis showed emergency operation (odds ratio 6.9, 95% Confidence Interval (C.I.) 2.43-19.23), peripheral vascular disease (odds ratio 1.33-12.3) and aortic cross clamping time (O.R. 1.018, 95% C.I. 1.002-1.034) to be associated with increased risk of operative mortality. Follow-up ranged between 7-13 years. Cox adjusted 10 years survival was 76%, and MACE (Major Adverse Cardiovascular Events)-free survival was 70%. Decreased survival was related to age (H.R. 1.067, 95% C.I. 1.045-1.090), CHF (H.R. 1.71, 95% C.I. 1.16-2.51), Emergency Operation (H.R. 1.62-95%, 1.04-2.51) and PVD (H.R. 2.42, 95% C.I. 1.49-3.93).

**Conclusions:** Bilateral ITA grafting is associated with good long-term results in patients operated on within the first week of acute MI.