

C75. Early And Late Outcome Of Aortic Valve Replacement For Aortic Stenosis In Patients With Severely Depressed Left Ventricular Function

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OBJECTIVES: Aortic valve replacement (AVR) is the treatment of choice in patients with severe symptomatic aortic stenosis (AS). Historical studies in the subgroup of patients with severely depressed ejection fraction (SDEF) have reported a significant progressive increase in operative mortality.

METHODS: We retrospectively analyzed prospectively collected data from 597 consecutive patients with AS (mean age 72±12 years; 49% female) undergoing AVR±CABG. Among these, 76 patients (13%) had SDEF (≤30%). Outcome endpoints included hospital mortality, major complications, and long-term survival. Multivariate analysis was performed to identify predictors of hospital mortality, major complications, and late survival.

RESULTS: Overall hospital mortality was 3.7% (EF≤30%, 5.3% vs. EF>30%, 3.5%; p=0.303). SDEF was not an independent risk factor of hospital mortality but predicted postoperative renal failure (odds ratio [OR]=7.7), sternal infection (OR=7.3), sepsis (OR=5.4), and respiratory failure (OR=3.7). Long-term survival was significantly decreased in SDEF patients: 87.4±3.9% and 78.5±5.6% vs. 94.7±1.0% and 80.7±2.4% at 1 and 5 years (p=0.001). Previous stroke (OR=2.8), hypertension (OR=3.5), congestive heart failure (OR=2.1), age>70 years (OR=2.0), and concomitant CABG (OR=1.6) were independent predictors of late mortality.

CONCLUSIONS: AVR may be performed with low mortality and excellent long-term survival in unselected patients with AS and severely depressed ventricular function. Although SDEF was a predictor of major morbidity, it was not a risk factor for hospital mortality. Incremental improvements in operative technique and perioperative management may have contributed to the reduction in the prognostic importance of poor left ventricular function.