

FRAILITY, AS MEASURED BY THE FACT, SUCCESSFULLY PREDICTS CERTAIN ADVERSE OUTCOMES FOLLOWING CARDIAC SURGERY

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CARDIAC SURGERY

BACKGROUND: Patients referred for cardiac surgery are increasingly frail and elderly. We have previously shown that frail patients, as measured by the Katz index, have markedly higher mortality and morbidity. The impact of more subtle levels of frailty remains unexplored. The objective of the current study is to explore the relationship between more subtle degrees of frailty and cardiac surgical outcomes in more detail.

METHODS: Participants (65 and over) undergoing isolated aortic valve replacement (AVR), coronary artery bypass graft (CABG) or combined CABG and AVR were eligible. Patients completed a Frailty Assessment for Care-Planning Tool (FACT), a sensitive instrument that measures frailty across four domains of function. Clinical outcomes and discharge status were abstracted and analyzed.

RESULTS: Study results (n=230) show that 88% of the participants were positive for at least one category of frailty at a level of 4/7 (vulnerable) or higher. Results also demonstrated that Overall FACT was not significantly predictive of surgical outcomes, before or after adjustment for EuroSCORE II; however, odds ratios demonstrated that Social, Daily Tasks, and Memory domains of frailty were associated with higher risk of mortality and/or MACE, while Social and Daily Tasks domains were predictive of higher risk of MACE alone ($P < 0.05$) after adjustment.

CONCLUSION: A large proportion of participants over the age of 65 demonstrate some degree of frailty and were more likely to be at increased risk for morbidity and MACE using specific domains of frailty. The impact of even subtle degrees of frailty is significant and the prevalence of frailty is higher than previously appreciated.