

MEETING ABSTRACT

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Gait Speed improves EuroSCORE II prediction

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Background/Introduction

Traditionally cardiac surgery risk scores have worse performance in elderly patients. Frailty evaluation may improve EuroSCORE II accuracy in predicting morbimortality

Aims/Objectives

Test the value of gait speed, a clinical marker for frailty, to improve the prediction of mortality and major morbidity in elderly patients undergoing cardiac surgery

Method

A multicenter prospective cohort of patients undergoing coronary artery bypass and/or valve replacement or repair from 12 tertiary care hospitals in São Paulo State/Brazil. Patients were eligible if they were at least 60 years of age. Frailty was defined as slow gait speed, a time taken to walk 5 m of ≥ 6 s. The primary end point was a composite of in-hospital post-operative mortality or major morbidity

Results

The cohort consisted of 241 patients with a mean age of 67.4 ± 8.2 years. One hundred and two patients (42.3%) were classified as slow walkers before cardiac surgery. Slow gait speed patients were more likely to be female (50.9% vs. 19.4%, $p = 0.0001$), insulin-dependence diabetic (23.5% vs. 13.6%, $p = 0.05$), had worse EuroSCORE II ($3.9\% \times 1.8\%$, $p = 0.001$). Frail patients had more prolonged length of stay (27.5% vs 7.9%, $p = 0.001$) and more morbimortality (32.4% vs 15.1%, $p = 0.002$). Slow gait speed was an independent predictor of the composite

end point after adjusting for the EuroSCORE II (odds ratio: 2.36; 95% confidence interval: 1.17 to 4.76) and increased EuroSCORE II accuracy from 67% to 71.9% in prediction of morbimortality

Discussion/Conclusion

Impaired Gait speed patients have more morbimortality. 5-meter gait speed test is an effective way to identify elderly patients at higher risk and is a simple way to improve EuroSCORE II performance

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