



Sarcopenia and mortality in a community-dwelling elderly individuals in Rio de Janeiro, Brazil

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Objective

- Evaluate the capacity of sarcopenia in predicting mortality in a large cohort of community-dwelling older adults living in urban area of Rio de Janeiro, Brazil 745 community-dwelling individuals, 65 years old and older;

Methods

- Variables: health habits, functional capacity, and anthropometric measures.
- Sarcopenia diagnostic: gait speed (GS), grip strength (HS) and muscle mass (MM) measured through anthropometry. (EWGSOP criteria)
- Mortality during 8 years of follow-up

Results

- Female: 71%; caucasians: 61.9%; average age: 76.6 (SD±6.9)
- 141 deaths; 30 (37.5%) with sarcopenia and 113 (18.9%) without
- 43 (27.6%) individuals with low MM died compared with 104 (17.7%) without it.
- Fifth four individuals (34.8%) with low HS died versus 103 (17.6%) without it.
- For low GS, 68 (44.7%) versus normal ones, 130 (22.3%) ($p < 0.01$).

Cox regression model for sarcopenia

	Model 1 (unadjusted)	Model 2 (adjusted)
Muscle Mass	1.5 (1.1 – 2.2)	
Handgrip Strength	2.2 (1.6 – 3.1)	
Gait Speed	2.4 (1.8 – 3.4)	
Sarcopenia	2.1 (1.4 – 3.2)	1.8 (1.2-2.8)
Cerebrovascular Disease		2,3 (1,3-4)
COPD		1,7 (1,05 – 3)
Falls		1.9 (1,4 – 2,8)

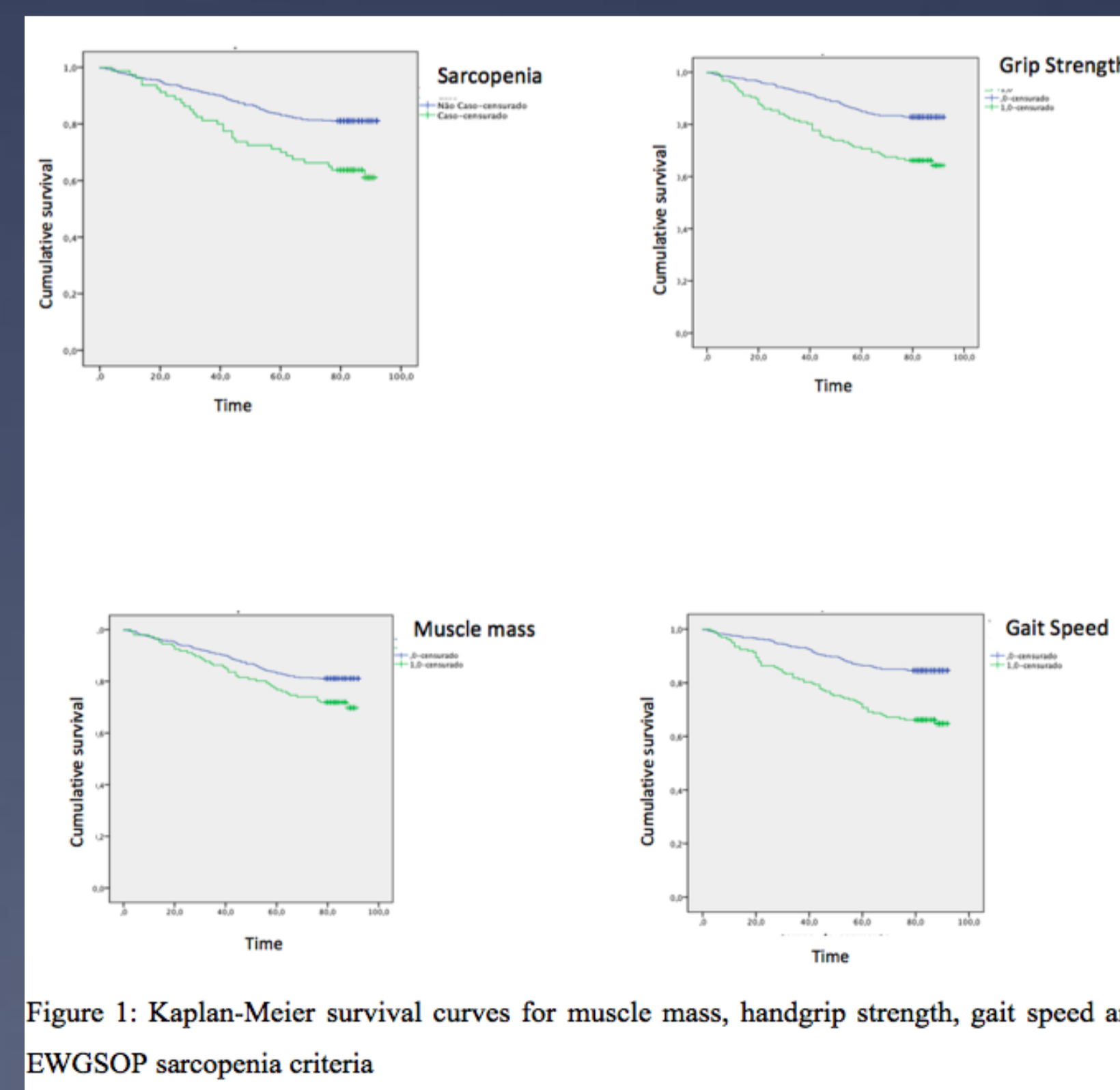


Figure 1: Kaplan-Meier survival curves for muscle mass, handgrip strength, gait speed and EWGSOP sarcopenia criteria

Conclusion

Sarcopenia was a predictor of mortality even after adjustment by confounders factors.