Abstract

Background: Frailty and sarcopenia are frequent conditions in the elderly and are related to inactivity and functionality. However, little is known about the influence of the sarcopenia indicators on the frailty profile or their functional implications. Objective: To evaluate whether the indirect indicators of sarcopenia and functionality influence the frailty profile in elderly subjects. Method: This was a cross-sectional study with 53 elderly subjects recruited by an active search in a secondary health care service. The indirect indicators of sarcopenia were body mass index (BMI), gait speed, Mini-Nutritional Assessment (MNA), Human Activity Profile (HAP), and handgrip strength. Frailty was characterized according to Fried's Frailty Phenotype. Functional capacity was assessed according to the Short Physical Performance Battery (SPPB). Physical activity level was assessed by HAP. Data were analyzed by analysis of variance (ANOVA) and multiple regression. Results: Overall, 75.5% of the subjects were women, with a mean age of 76.72 (±5.89) years; 15.1% were frail and 54.7% pre-frail; and the level of physical activity was the most prevalent indicator of sarcopenia. Significant differences (p<0.05) were observed in both the physical activity level and gait speed between the non-frail and pre-frail groups and between the non-frail and frail groups. In addition, some sarcopenia indicators were associated with functional capacity and geriatric depression score. Conclusion: The level of physical activity and gait speed appeared to be the most relevant factors in the development of frailty in the study sample, which may have functional implications.

Keywords

Sarcopenia, frail elderly subject, physical inactivity, disability, rehabilitation.