



TRACTION DYNAMOMETRY AND PHYSICAL PERFORMANCE FOR THE EVALUATION OF SARCOPENIA IN COMMUNITY INDEPENDENT ELDERLY

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BACKGROUND

Sarcopenia is a syndrome characterized by progressive decrease of mass, strength and muscle function, being poor physical performance as indicative of severe sarcopenia. The association of mass reduction and lack of muscle strength results in a greater risk of falls, hospitalizations, dependence, institutionalization, worsening of quality of life and mortality.

MATERIALS AND METHODS

A cross-sectional study was carried out with 49 elderly women (> 60 years old) who were independent in an Elderly Center in which the following tests were performed: 1) Anthropometric Assessment 1.1) BMI was obtained by the result of the ratio between body weight in kilograms and height in meters squared ($IMC = \text{weight} / \text{height}^2$); 1.2) Calf Circumference being considered sarcopenia values <31cm. 2) Functional performance evaluation: 2.1) The manual traction force (MTF) was evaluated in kilograms (kg) using the Elastic @ digital dynamometer; 2.2) Test of Speed of March (MV) where the time used to complete the course was divided by the distance of 10m, providing the measurement of the speed of march (m / s); 2.3) Timed Up and Go (TUG) test in which the elderly woman should get up from a chair without the help of her arms and walk at a comfortable pace from a distance of three meters, turn around, return and sit again.

RESULTS

39 elderly women with an average age of 70.3 years (60 - 93) with an average BMI of 27.94 kg/m² (22.03 - 34.95) and an average circumference of the calf were 35.39 cm (45.17 - 31.5) [VR ≤ 31 cm]. Regarding

evaluation of upper limb strength, the average of the manual traction force performed by the right elbow flexion was 7.94 Kgf (3.2 - 12.8) and the squatting force testing the lower limbs was 21.32 Kgf (7 -42.4). The average velocity tests of 0.62 m / s (0.37 - 0.96) [VR \leq 0.8 m / s] and the TUG of 10.34 (6.7 - 18.5) [VR: up to 12.4s] completed the physical performance assessment.

CONCLUSION

The sample analysis reveals a population with more advanced and overweight age group. In parallel, despite the averages of strength and physical performance that assess the risk for falls being within normal range, a large standard deviation is revealed showing the particularities of aging. Understanding the factors involved in this process in Brazil is necessary to promote policies and management appropriate to the profile of our population, which will significantly reduce morbidity and socioeconomic costs.