Abstract

Objectives: To evaluate the usual gait speed of asymptomatic adult and elderly Brazilians with a 10-meter walk test and to compare the results with foreign reference values. Methods: Seventy-nine asymptomatic volunteers 40 years old of both genders were assessed. After anamnesis, anthropometry and the application of a habitual physical activity questionnaire, the volunteers were submitted to a 10-meter walk test at usual speed by means of which gait speed, the number of steps and length of stride were calculated. Results: Except for age, all study variables were significantly lower in women. Subjects 70 years old presented a significantly lower gait speed than subjects between 40 and 49 years old and between 50 and 59 in both men (1.09±0.18 m/s, 1.35±0.11 m/s and 1.34±0.22 m/s, respectively) and women (1.02±0.10 m/s, 1.27±0.20 m/s and 1.27±0.15 m/s, respectively). Gait speed showed moderate correlations with age (r=-0.41, p<0.001) and height (r=0.35, p=0.001). After multiple regression analysis, age and gender were selected as relevant attributes of gait speed in that they explained 24.6% of this variable. The gait speed values in this study were significantly lower than foreign reference values (p<0.05). Conclusions: The gait speed presented age-related decline and values significantly lower than those described for foreign populations. This finding indicates the need for comprehensive investigation of gait speed reference values for the Brazilian population.

Keywords

Gait kinematics, gait speed, 10-meter walk test.