screening tool that, when abnormal, should be followed by the MRC to specifically identify the typical distribution of muscle weakness. Information on muscle strength from hospital admission to discharge can provide specific starting points for personalized interventions to combat sarcopenia and prevent functional decline in the hospital setting and after acute hospitalization.
Keywords: Aged, Hospitalization, Muscle Strength

Conflict of interest: The authors declare no conflict of interest.
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RISK OF SARCOPENIA AND ASSOCIATED FACTORS IN HOSPITALIZED OLDER ADULTS WITH CARDIOVASCULAR DISEASE

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Background: Low muscle strength and mass with possible impaired physical performance characterizes the muscle disease known as sarcopenia. When not diagnosed or treated, the risk of falls, fractures, hospitalization, hospital costs, longer hospital stays, and negative outcomes increases. In the presence of comorbidities, such as cardiovascular diseases, sarcopenia can be significant and serious. In these patients, muscle weakness has attracted considerable attention in recent years since it is deemed an independent risk factor for disability and a strong predictor of premature death. The SARC-F (simple questionnaire to rapidly diagnose sarcopenia), a valid and consistent instrument to detect people at risk of adverse outcomes associated with sarcopenia, including functional decline, can be used as a screening tool. It consists of 5 items self-reported by patients based on their perceptions regarding strength limitations, the ability to walk, rise from a chair, climb stairs and a number of falls.
Objectives: Analyze the risk of sarcopenia and identify associated factors in hospitalized older adults with cardiovascular disease.
Methods: This is a cross-sectional study conducted with 23 hospitalized older adults with cardiovascular disease in a tertiary hospital of the Federal District, Brazil, classified into two groups: with or without risk of sarcopenia according to the SARC-F. Demographic (age and sex), clinical (number of medications and body mass index —BMI) and physical data (muscle strength and mass) were collected. Muscle strength was assessed using handgrip dynamometry and the Medical Research Council (MRC) scale, and mass by means of electrical bioimpedance. These data were compared between the groups using the student's t and Mann-Whitney U tests.
Results: There was a risk of sarcopenia in 39.1% (n=9) of the sample. In comparison analyses, the group of older adults at risk of sarcopenia were older (mean difference: 14.39 years [95%CI 8.23 — 20.55]; p=0.001), exhibited lower handgrip strength (mean difference: 9.36 KgF [95%CI 0.874 — 17.854]; p=0.032), more frequent muscle weakness on the MRC scale ($X^2(1)=5.367$, p=0.047) and lower appendicular muscle mass (mean difference: 0.763 [95%CI 0.113 — 1.414]; p=0.024). The groups showed no differences for sex, BMI and number of continuous use drugs (p>0.05).
Conclusion: This study found that older adults at risk of sarcopenia are older and obtain worse physical results when compared to their risk-free counterparts. The SARC-F was able to identify hospitalized patients with lower strength and muscle mass.
Implications: The findings show the need to identify hospitalized older adults at risk of sarcopenia using a simple, fast, low-cost, non-invasive assessment, which may contribute to the establishment of early identification strategies in a hospital setting, aimed at developing more assertive measures.
Keywords: Aged, Sarcopenia, Risk Factors

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RELATIONSHIP BETWEEN CARDIORESPIRATORY FITNESS AND INHIBITORY CONTROL IN CHILDREN AFTER AN ACUTE HIIT SESSION: A CROSS-RANDOMIZED TRIAL

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Background: Studies suggest that acute exercise may be beneficial for executive control (Hillman et al, 2003). This result appears especially in the incongruent condition of the flanker test, where inhibitory control is more necessary. In addition, evidence suggests that complementary cardiorespiratory activity is positively related to executive functions in childhood.
Objectives: To analyze the relationship between cardiorespiratory fitness and inhibitory control and compare the acute effects of two HITT protocols on the inhibitory control of schoolchildren
Methods: This trial included 21 children in the 4th year of a municipal school in the city of Belém. Cardiorespiratory fitness was assessed using the 20-meter shuttle test. The volunteers ran at a pace set by a cell phone application that emitted beeps at specific intervals for each stage. The duration of the test depends on each person's cardiorespiratory fitness. Then, based on the level of cardiorespiratory fitness, the participants were divided into two groups (Good, n=10; Regular, n=11) The method used was the randomized crossover clinical trial, in which all participants performed two separate visits each other for a period of 72 hours. In each visit, the subjects were submitted to a different HIIT protocol: The Tabata protocol lasted 4 minutes with 8 series of 20 seconds of maximum effort and 10 seconds of rest. The Progressive protocol lasted 5 minutes, with 5 series of 20 seconds of maximum effort followed by 30,40,50,60 and 20 seconds of passive rest respectively, the exercises used body weight and consisted of squats, jumps and races. And to evaluate the inhibitory control, the computerized Flanker test was used. The test was applied at rest, before HIIT, and repeated 11 minutes after performing the exercises. Results were analyzed by estimation statistics and results expressed as significance (p), confidence interval (95%) and effect size (g). Congruent and incongruent response time (RT) were analyzed.