

analysis was performed using the Statistical Package for the Social Sciences (SPSS – 26.0), with a significance level set at  $P = 0.05$ .

**Results:** A significant reduction in HR was observed in the TRLB+RFS+IMT protocol when comparing pre-intervention to 10 minutes post-intervention and immediately post-exercise to 10 minutes post-intervention. In the TRMB+IMT protocol, there was also a reduction at 10' post when compared to pre-intervention, with no intergroup differences observed. In the TRLB+RFS+IMT protocol, systolic blood pressure (SBP) decreased when comparing pre vs. 10' post-intervention and immediately post vs. 10' post-intervention across all three protocols. Diastolic blood pressure (DBP) did not show significant intergroup differences; however, the Friedman ANOVA test indicated a significant reduction in the TRLB+RFS+IMT protocol between pre-intervention vs. 10' post and immediately post vs. 10' post.

**Conclusion:** RT, associated with IMT, with or without BFR, promoted a hypotensive effect on SBP and a decrease in HR. However, the TRLB+RFS+IMT was the only protocol that showed a hypotensive effect on DBP. Therefore, further studies are needed to evaluate the chronic effects of these protocols to identify the long-term efficacy of the intervention.

**Implications:** The reduction in BP and HR provided by RT associated with IMT, with or without BFR, was able to optimize gains in the clinical rehabilitation of COPD, as exercise tolerance and functional capacity increased.

**Keywords:** COPD, BFR, Diastolic blood pressure

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## DUKE ACTIVITY STATUS INDEX: CORRELATION WITH FUNCTIONAL MEASURES IN CHAGAS DISEASE PATIENTS FROM AN ENDEMIC REGION

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**Background:** Chagas disease is a neglected tropical disease that can progress to a chronic cardiac form, leading to functional impairment and reduced exercise tolerance. Assessing functional capacity in this population is essential for guiding rehabilitation strategies. The Duke Activity Status Index (DASI) is a questionnaire-based tool commonly used to estimate functional capacity, but its correlation with other objective and subjective functional measures in Chagas disease remains unclear.

**Objectives:** To evaluate the correlation between the DASI and functional performance measures, including the Human Activity Profile (HAP), the Sit-to-Stand Test (STS), and handgrip dynamometry, in patients with Chagas disease.

**Methods:** A cross-sectional study was conducted with 50 patients diagnosed with Chagas disease ( $66 \pm 8$  years) in an endemic area for Chagas disease. Participants completed the DASI and HAP questionnaires and underwent physical performance tests, including the STS (5-repetition, 10-repetition, 30-second, and 1-minute protocols) for lower limb strength and endurance, as well as handgrip dynamometry for overall muscle strength. Correlation analysis was performed using Pearson's or Spearman's correlation coefficients, depending on data distribution.

**Results:** The mean DASI score was  $25.3 \pm 9.4$ . The DASI showed a significant correlation only with the maximum ( $r = 0.714$ ;  $p < 0.001$ ) and adjusted HAP scores ( $r = 0.635$ ;  $p < 0.001$ ), suggesting an association with self-reported physical activity levels. However, DASI did not correlate with the STS or handgrip strength, indicating that it may not reflect actual lower limb strength or endurance in patients with Chagas disease.

**Conclusion:** The DASI showed a strong correlation with self-reported physical activity levels but did not correlate with objective functional tests, suggesting it may not fully reflect the physical performance of patients with Chagas disease. These findings highlight the importance of combining subjective and objective measures for a more comprehensive assessment of functional capacity in this population.

**Implications:** These findings suggest that the DASI may not fully capture the functional performance of patients with Chagas disease, particularly regarding muscle strength and endurance. While the DASI correlates with subjective measures of activity levels, its lack of association with objective tests highlights the need for complementary functional assessments in clinical practice. Therefore, incorporating performance-based tests such as STS and handgrip strength alongside self-reported questionnaires may provide a more comprehensive evaluation for guiding rehabilitation programs in this population.

**Keywords:** Chagas disease, Cardiac Impairment, Functional Assessment

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## ASSESSMENT OF PERIPHERAL MUSCLE STRENGTH OF PEOPLE WITH DIFFERENT LEVELS OF POST-COVID-19 DYSFUNCTION

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**Background:** The late impact of Covid-19 has proven to be significant, largely affecting the functionality, ability to perform daily activities and the quality of life of its survivors. In Brazil, more than 39 million people have recovered from Covid-19, however, many of them still face persistent symptoms and are referred to rehabilitation programs. Muscle weakness is one of the post-Covid changes that causes concern, given the range of problems inherent to the loss of muscle strength for global health, especially among the elderly and in people with chronic illnesses.

**Objectives:** To evaluate the peripheral muscle strength of people undergoing post-COVID-19 rehabilitation, with different levels of post-COVID-19 dysfunction. In the post-covid period, point to the discriminatory aspect of this scale in the assessment and assertive therapeutic prescriptions for this population.

**Methods:** Sectional study with a convenience sample composed of adults recovered from Covid-19. The degree of post-Covid dysfunction was assessed on admission using the post-Covid-19 Functional Status (PCFS) scale, in grades I to IV, characterized by the presence of persistent symptoms (grade I), with limitations in usual tasks (grade II), or with inability to perform some activities (grade III), and even severe dysfunctions including self-care (grade IV). Muscle strength was obtained by the handgrip strength (HGS) test in