kilograms of force (kgf), with a Saehan® hydraulic dynamometer. The values obtained were analyzed in relation to the predicted values and between subgroups with different PCFS levels using the Student's T test, adopting a significance level of 5%.
Results: 68 people were evaluated between May/2021 and July/2022, aged 50 ± 14.7 years, 41 women (60%) and 40 with PCFS grade II (59%), which indicates the presence of persistent symptoms and reduced performance in activities. The post-covid time was 66 days, ranging from 19 to 485 days since diagnosis. Furthermore, 37 individuals were hospitalized for acute Covid (54%), 43 were previously sedentary (63%) and the majority were overweight or obese (83%). The FPP obtained was lower than predicted for the total sample and when distributed by PCFS grades, not differing significantly between the groups by PCFS. Then, HGS was compared between the subgroups of grades I/II with those of grades III/IV, for which there was a similar proportion of sedentary people and those hospitalized for Covid-19. The proportion of women was higher in the subgroup with PCFS III/IV (92% × 53%). BMI (body mass index) was higher in the PCFS I/II group (30.9 × 27.6 kg/m^2; p:0.052). People with PCFS I/II had higher HGS than people with grades III/IV (29.4± 11.2 × 18.23 ± 6.89 kgf, respectively; p:0.0008).
Conclusion: Post-covid HGS was generally compromised, but significantly among people with a higher degree of post-covid dysfunction, as measured by the PCFS scale.
Implications: These findings, in addition to showing the need for monitoring and intervention to recover muscle strength in the post-covid period, point to the discriminatory aspect of this scale in the assessment and assertive therapeutic prescriptions for this population.
Keywords: Post-Acute COVID-19 Syndrome, Functional Status, Muscle Strength

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ASSOCIATION BETWEEN MAXIMAL PHONATION TIME AND SLOW VITAL CAPACITY IN PEOPLE WITH HEART FAILURE HOSPITALISED FOR ELECTIVE CARDIAC SURGERY

Matheus de Castro Sales, Larissa Maria Lima, Fernanda Magalhães Lazzaretti, Carolina Lira, Sofia Machado Nogueira De Oliveira, Carina Batista de Oliveira, Daniela Gardano Bucharles Montalverne, Rafael Mesquita
Department of Physiotherapy, Universidade Federal do Ceará (UFC), Fortaleza, CE, Brazil

Background: A reduction in lung function in people with heart failure (HF) after cardiac surgery is common and associated with morbidity. In this scenario, lung function is commonly assessed pre- and postoperatively with the slow vital capacity (SVC) measured with a ventilometer. However, new outcomes have been suggested to reflect the impact of surgery on lung function, such as the maximum phonation time (MPT). So far, the association between MPT and SVC has not been studied properly in HF.
Objectives: To investigate the association between MPT and SVC in people with HF hospitalised for elective cardiac surgery.
Methods: This cross-sectional analysis included people with HF evaluated in the hospital before elective cardiac surgery. Sociodemographic data, anthropometric, and clinical characteristics were collected for sample characterisation. SVC was measured in mL with a ventilometer, by asking participants to inhale deeply and exhale slowly and completely into the device after a demonstration. MPT was measured as the maximum time in seconds, recorded with a stopwatch, to sustain the vocalisation of the vowel /i/ (in portuguese), in natural tone and intensity, after a demonstration. For both variables, the greatest result out of three repetitions was used for analysis. Jamovi 2.6.25 software was used to run the statistical tests: Spearman correlation coefficient and Mann-Whitney test. P-values < 0.05 was considered statistically significant.
Results: 74 individuals were included (57% women, 60 ± 11 years, New York Heart Association Functional Classification of 2 ± 1 points). The mean SVC was 2640 ± 874 mL, while the mean MPT was 12.2 ± 9.4 seconds. These two variables showed a weak and non-significant correlation (rs = 0.19; p = 0.10). After dividing the sample in two according to the mean SVC (< or = 2640 mL), no statistically significant difference was observed when comparing MPT between the two groups (10.3 ± 7.8 vs. 13.9 ± 10.5 seconds, respectively; p = 0.18).
Conclusion: In this study, MPT was not associated with SVC in individuals with HF before elective cardiac surgery. Future studies should investigate the same analyses investigated in our study, but in larger samples and at different time points, such as after surgery.
Implications: Despite the ease of measuring MPT, our findings suggest that MPT should not be used to reflect the impact of cardiac surgery on lung function in people with HF when SVC is not available.
Keywords: Cardiac Surgical Procedure, Preoperative Period, Vital Capacity

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ASSOCIATION BETWEEN SMOKING DURATION, PHASE ANGLE, AND CARDIORESPIRATORY CAPACITY IN ELDERLY SMOKERS: PRELIMINARY RESULTS

Alan Gonçalves Batista[a], Marcela Monteiro Ribeiro Lemos[b], Bruna Beckman Arnaud[b], Laerte Jonatas Leray Guedes[a], Saul Rassy Carneiro[c], Laura Maria Tomazi Neves[c]
[a] *Programa de Pós-Graduação em Ciências do Movimento Humano, Universidade Federal do Pará (UFPA), Belém, PA, Brazil*
[b] *Faculdade de Fisioterapia e Terapia Ocupacional, Universidade Federal do Pará (UFPA), Belém, PA, Brazil*
[c] *Complexo Hospitalar Universitário João de Barros Barreto, Programa de Pós-Graduação em Ciências do Movimento Humano, Universidade Federal do Pará (UFPA), Belém, PA, Brazil*

Background: Smoking can contribute to the functional decline of elderly individuals, negatively impacting cellular integrity and cardiorespiratory function. Thus, prolonged exposure to harmful cigarette substances may accelerate the decline in functional capacities. Investigating the association between smoking duration and these markers can provide a better understanding of the impacts of smoking on cell healthy and cardiorespiratory capacity.
Objectives: To investigate the association between smoking duration, phase angle, oxygen consumption (VO_2 peak), and forced vital capacity (FVC) in elderly smokers.