such as sample size and patient profile, may have influenced the results of this study.

Keywords: COVID-19, Acute Post-COVID-19 Syndrome, Urinary incontinence

Conflict of interest: The authors declare no conflict of interest. **Acknowledgment:** Not applicable.

Ethics committee approval: The study was approved by the Research Ethics Committee of the Municipal Secretariat of Porto Alegre, under registration number 4.858.291.

https://doi.org/10.1016/j.bjpt.2024.100793

197

COMPARISON OF BALANCE AND MUSCLE STRENGTH IN COMMUNITY-DWELLING OLDER ADULTS CLASSIFIED BY THE PHYSICAL FRAILTY PHENOTYPE: PRELIMINARY RESULTS

Jéssica R Almeida¹, Paula MM Arantes¹, Isabelle P Assis¹, Renata N Kirkwood², Renan A Resende¹, Juliana M Ocarino¹ ¹ Postgraduate Program in Rehabilitation Sciences, Department of Physical Therapy, School of Physical Education, Physical Therapy and Occupational Therapy, Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, Minas Gerais, Brazil

² McMaster University, Hamilton, Ontário, Canadá

Background: Frailty is a clinical condition that results in increased vulnerability to adverse health outcomes in older adults, such as falls, hospitalization, disability, and mortality. Thus, great efforts have been made to prevent the transition from the robust elderly to the frail state. We know that balance and muscle strength are often addressed to prevent these negative outcomes, however, it is unclear if there are differences between groups classified by physical frailty.

Objectives: To compare balance (One-leg standing, postural stability in gait, sensory interaction in balance, chair sit-up) and muscle strength (trunk extensors-TE, hip extensors-HE, hip abductors-HA, knee extensors-KE, and plantar flexors-PF) in community-dwelling older adults classified as robust (non-frail) and vulnerable (pre-frail or frail)).

Methods: Cross-sectional observational study with communitydwelling older adults (60 years or older) of both sexes, with independent gait and recruited by convenience. One-leg standing balance (30 seconds), postural stability in gait (Functional Gait Assessment), sensory interaction in balance (Modified Clinical Test of Sensory Interaction and Balance), sit-up from a chair five times, and muscle strength (maximal isometric contraction) of TE, HE, HA, KE, and PF, expressed by torque and normalized by body weight (microFET2 hand dynamometer) were assessed. The robust and vulnerable elderly were classified by physical frailty phenotype. Mann-Whitney analysis was used to compare the variables between groups. The significance level was set at 5%.

Results: 118 older adults were evaluated, of these 35 were robust and 85 were vulnerable. Descriptive and comparison data were expressed as mean \pm standard deviation for the robust and vulnerable groups, respectively: one-leg standing balance (18.17 seconds \pm 2.09; \pm 10.73 seconds \pm 1.16; p=0.005), postural stability in gait (23.80 \pm 0.73; 21.41 \pm 0.55; p = 0.014), sensory interaction in balance (113.83 seconds \pm 1.98; 102.98 seconds \pm 2.30; p=0.001), chair sit-up (10.78 seconds \pm 0.30; 13.77 \pm 0.61; p=0.001), TE muscle strength (1.17 \pm 0.081; 0.98 \pm 0.04; p=0.069), HE (0.47 \pm 0.46; 0.42 \pm 0.02; p=0.463), HA (1.01 \pm 0.05; 0.88 \pm 0.03; p=0.068), KE (1.23 \pm 0.09; 1.04 \pm 0.04; p= 0.111), PF (1.59 \pm 1.10; 0.82 \pm 0.41; p=0.059). According to the

results only the balance variables showed difference between the groups.

Conclusion: The older adults vulnerable to physical fragility had worse one-leg standing balance, less postural stability during gait, less sensory interaction on balance and spent more time to get up from a chair when compared to the robust elderly. Parameters of muscle strength showed no differences between the groups. Continuation of the study with increased sample size is necessary for confirmation of the results. Support from CAPES, FAPEMIG, CNPq. *Implications:* From the findings found, it highlights the importance of evaluating balance in several perspectives in older adults' people vulnerable to physical frailty. Further studies may address whether interventions directed at these variables can modify frailty status. *Keywords:* Frailty, Balance, Muscle strength

Conflict of interest: The authors declare no conflict of interest. Acknowledgment: We thank CAPES, FAPEMIG, CNPq, and all the volunteers who participated in this study for their support. Ethics committee approval: Federal University of Minas Gerais (CAAE: 60772022.6.0000.5149).

https://doi.org/10.1016/j.bjpt.2024.100794

198

EFFECT OF SARCOPENIA ON SURVIVAL, HOSPITALIZATION, AND FUNCTIONAL CAPACITY OF ADULTS AND ELDERLY WITH LUNG CANCER

Jhonata de Marco vieira¹, Taina de Souza Lopes¹, Gustavo dos Santos Ribeiro², Marlus Karsten¹

¹ Department of Physical Therapy, Santa Catarina State University (UDESC), Florianopólis, Santa Catarina, Brazil

² Department of Physical Therapy, Federal University of Health Sciences of Porto Alegre (UFCSPA), Porto Alegre, Rio Grande do Sul, Brazil

Background: Lung cancer is associated with numerous metabolic abnormalities that can cause changes in body composition and neuromuscular capacity. Sarcopenia refers to the progressive loss of strength, muscle mass, and performance, being an independent predictor of poor prognosis in patients with lung cancer, in addition to being considered a risk factor for increased chemotoxicity.

Objective: To evaluate the effect of sarcopenia on survival, length of hospital stays and functional capacity of patients with lung cancer.

Methods: This is a systematic review developed according to the Cochrane manual for systematic reviews with the following eligibility criteria: (P) patients with lung cancer; (E) sarcopenia; (C) absence of sarcopenia; and (O) survival, length of hospital stay and functional capacity. Searches were conducted in the databases: CINAHL, Cochrane Library, EMBASE, IBECS, LILACS, Livivo, PEDro, PubMed/MEDLINE, SciELO, Scopus and Web of Science. Study screening was performed on the Rayyan platform by two independent reviewers. Potentially eligible studies were read in full for final decision. Disagreements were resolved in consultation with the senior reviewer. Methodological quality was observed using a New-castle Ottawa scale for cohort studies. Data were organized and analyzed in an electronic spreadsheet. The research protocol is registered in the PROSPERO database (CRD42022355782).

Results: The initial search retrieved 3,542 titles. The final selection resulted in 14 studies included for the qualitative synthesis. The included studies are observational, predominantly with a retrospective cohort design, and have good methodological quality (7 to 8 points). The final sample consisted of 4,062 patients with lung cancer (age 66.3 \pm 5.4 years), of which: 1,343 were sarcopenic and