Elderly women: a cross-sectional study

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Background: Urinary Incontinence (UI) is characterized by the International Continence Society (ICS) as any involuntary loss of urine, and several factors may be linked to this phenomenon, such as age, menopause, and some chronic diseases. However, the relationship between dynapenia and UI has been highlighted in the literature. Dynapenia, defined by the loss of muscle strength, is an event inherent to aging, and this muscle weakness, when specific regions, such as the pelvic floor, can lead to greater UI events.

Objectives: To verify the association between dynapenia and the presence of UI in elderly women living in the city of Porto Alegre, RS.

Methods: Descriptive and cross-sectional study. The population consisted of women over 60 years of age living in a neighborhood in the city of Porto Alegre, RS. A descriptive questionnaire was used to characterize the subjects and the UI assessed through the International Consultation on Continence Questionnaire – Short Form (ICQ-SF). Muscle strength was assessed using the Sit and Stand Test (SST) and Hand Grip Dynamometry using a Jamar brand dynamometer.

Results: 298 elderly women were assessed, and in 78 (33%) the presence of UI was identified. The mean age of women without UI was 75.03 ± 7.1 years versus 75.03 ± 6.87 years with UI (p= 0.287). There were no significant differences in any of the sample characterization variables, demonstrating that the samples were homogeneous. As for TSL, there was no statistical significance (p=0.086). In Dynamometry, there was a significant difference in favor of the group without UI (p=0.020). The Chi-square test was used to compare the presence of UI with dynapenia, where dynapenic elderly women with UI were 36%, and dynapenic women without UI were 21% (x²=0.0132).

Conclusion: The study indicated that dynapenic elderly women had a higher prevalence of UI, however, other studies seeking to analyze the prospective behavior of these variables should be developed, with larger samples and in different places, in order to reduce the influence of habits and environment.

Implications: UI has a high prevalence in the elderly and its relationship with dynapenia must be considered, and this outcome must be considered in the geriatric evaluation and rehabilitation.

Keywords: Urinary Incontinence, Muscle strength, Elderly

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196

URINARY INCONTINENCE IN PATIENTS INFECTED BY SARS-COV 2 AFTER HOSPITAL DISCHARGE: A CROSS-SECTIONAL STUDY

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Background: The SARS-CoV-2 epidemic, which killed more than 15 million people worldwide, in addition to high mortality, brought a series of post-COVID consequences. According to the current literature, the main persistent symptoms after infection are fatigue, dyspnea and muscle pain. Another important possible damage, still little discussed in the literature, refers to the association of SARS-CoV-2 infection with the prevalence of Urinary Incontinence (UI). This condition is more prevalent among women, ranging from 25 to 45% in the global population, affecting the health and quality of life of this population.

Objectives: To identify the prevalence of UI in patients infected with SARS-CoV-2 after hospital discharge and describe the sociodemographic and clinical profile of these subjects.

Methods: Descriptive and cross-sectional study. The population consisted of individuals after hospital discharge due to SARS-CoV-2 infection. Data collection was carried out via telephone call by a previously trained researcher, after hospital discharge, using a structured instrument asking sociodemographic data, previous conditions, hospitalization conditions, UI assessment and use of the Functional Status Scale (PCFS), from September 2021 to October 2022. The sample size was calculated by using the study by Dhar et al. (2020) as a reference. Adopting a significance level of 85%, acceptable error of 5% and a prevalence rate of 7%, indicating a sample size of 54 subjects. To verify the association of variables with the presence of urogenital disorders, the Chi-Square, Fisher’s Exact, Student’s t, Mann-Whitney and Multivariate Analysis tests were applied.

Results: The sample consisted of 32 women (56.4 ±1.3 years) and 27 men (49.5 ±10.7 years), the women being 7 years older (p=0.022). The prevalence of UI in the sample was 15.25%, with only women affected. The presence of UI pre versus post hospitalization for SARCoV-2 did not change (15.25% and 15.25%, respectively). During hospitalization, 28.8% of the sample required care in the Intensive Care Unit (ICU), with an average of 26.4 ± 40 days of hospitalization. As for the disability condition evaluated with the PCFS scale, grades 3 and 4 (moderate and severe) were identified in 44.1% of the individuals. In the multivariate analysis, in the model with different variables (age, hypertension, kidney disease, insomnia and emotional disorders), only the emotional aspects showed a significant association between the outcomes (p=0.034).

Conclusion: The prevalence of UI among the assessed sample did not change after hospital discharge due to hospitalization due to COVID-19. Women had a higher prevalence of UI, with emotional aspects being the variable associated with outcomes.

Implications: The consequences of COVID-19, especially in post-discharge patients, need to be better investigated. Some limitations,
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.

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197

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

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**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 community-dwelling 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 ± standard deviation for the robust and vulnerable groups, respectively: one-leg standing balance (18.17 seconds ± 2.09; 10.73 seconds ± 1.16; p = 0.005), postural stability in gait (23.80 ± 0.73; 21.41 ± 0.55; p = 0.014), sensory interaction in balance (113.83 seconds ± 1.98; 102.98 seconds ± 2.30; p = 0.001), chair sit-up (10.78 seconds ± 0.30; 13.77 ± 0.61; p = 0.001), TE muscle strength (1.17 ± 0.98; 1.98 ± 0.4; p = 0.069), HE (0.47 ± 0.46; 0.42 ± 0.02; p = 0.463), HA (1.01 ± 0.05; 0.88 ± 0.03; p = 0.068), KE (1.23 ± 0.09; 1.04 ± 0.04; p = 0.111), PF (1.59 ± 1.10; 0.82 ± 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.

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**Ethics committee approval:** Federal University of Minas Gerais (CAAE: 60772022.6.0000.5149).

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198

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

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**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, IBGC, 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 Newcastle Ottawa scale for cohort studies. Data were organized and analyzed in an electronic spreadsheet. The research protocol is registered in the PROSPERO database (CRD4222355782).

**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 ± 5.4 years), of which: 1,343 were sarcopenic and

103