

relationship between functional status and quality of life when monitoring this population.

Implications: Future studies should investigate strategies for maintaining functional status for as long as possible and whether they are able to improve the quality of life of individuals with ALS.

Keywords: Amyotrophic Lateral Sclerosis, Quality of life, Rehabilitation

Conflict of interest: The authors declare no conflict of interest.

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ARE QUALITY OF LIFE, WALKING CAPACITY AND FUNCTIONAL STATUS DIFFERENT IN INDIVIDUALS AFTER WAKE-UP STROKE AND NON-WAKE-UP STROKE?

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Background: Stroke is defined as a clinical syndrome resulting from reduced blood flow to brain structures, with development of focal and global signs of brain deficit, with no apparent cause other than vascular. Stroke can be classified as ischemic or hemorrhagic, with the first one being more prevalent. Wake-up Stroke is a type of ischemic stroke, in which the first stroke symptoms are noticed right after waking up. Studies indicate that Wake-up Stroke may be related to obstructive sleep apnea, the most prevalent sleep disorder in post-stroke individuals and worse post-stroke outcomes.

Objectives: To investigate differences between post-stroke groups in the chronic stage that had or did not have Wake-up Stroke in relation to quality of life, walking capacity and functional status.

Methods: Exploratory cross-sectional study. Inclusion criteria were individuals aged 20 or over, diagnosis of ischemic stroke, post-stroke time greater or equal to 6 months, ability to walk independently and absence of cognitive alterations. The stroke was classified as a Wake-up Stroke if the first signs of the stroke were noticed shortly after awakening. The dependent variables were quality of life, walking capacity and functional status, measured by EuroQol, Six-Minute Walk Test and Modified Ranking Scale respectively. The independent t test was used to compare the Wake-up Stroke and non-Wake-up Stroke groups, considering a significance level of 5%. Statistical tests were performed using SPSS program (version 19.0).

Results: The study included 52 individuals with a mean age of 61 years and mean duration of 53 months. 13 (25%) individuals had a stroke classified as Wake-up Stroke. Most of the participants were male (55.8%), did not practice regular physical exercise (80.8%), had systemic arterial hypertension (80.8%) and were classified as intermediate or high risk for obstructive sleep apnea (82.7%). The analysis showed that there was no significant difference between groups regarding quality of life ($p < 0.576$), walking ability ($p < 0.815$) and functional status ($P < 0.645$).

Conclusion: There was no difference between the groups that had or did not have Wake-up Stroke in terms of quality of life, walking ability and functional status. However, it is important to consider that 25% of the sample showed the first signs of stroke upon awaking and that more than 80% of the individuals were classified as intermediate or high risk for obstructive sleep apnea. Therefore, further

studies are needed for a better understanding of Wake-up Stroke and its relationship with the rehabilitation process and sleep disorders.

Implications: Longitudinal studies with larger samples are still needed to confirm the findings of the present study, as well as to investigate the relationship between Wake-up Stroke and other important post-stroke outcomes.

Keywords: Ischemic Stroke, Wake-up Stroke, Rehabilitation

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ASSESSMENT OF HANDGRIP STRENGTH IN ELDERLY PATIENTS UNDERGOING HEMODIALYSIS: AGREEMENT AMONG DIFFERENT STANDARDS

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Background: The reduction in handgrip strength is a predictor of increased length of hospital stay, functional limitation, reduced quality of life and mortality.

Objectives: to evaluate the agreement between the three reference standards for handgrip strength in elderly patients with chronic kidney disease undergoing hemodialysis.

Methods: Cross-sectional and analytical study, with participants of both gender, over 18 years of age, on hemodialysis for more than three months in the nephrology unit of the Hospital Regional de Taguatinga, between June 2019 and April 2019. Data on dialysis time, presence of diabetes, hypertension and cause of kidney disease were obtained through Trackcare[®] electronic records. Handgrip strength was measured on the dominant limb or contralateral to the presence of arteriovenous fistula using a Jamar[®] hydraulic dynamometer. The three reference standards used for the diagnosis of low handgrip strength were: 1) European Working Group on Sarcopenia in Older People (EWGSOP 2019) considering cutoff points for men < 27 kgf and for women < 16 kgf; 2) Reference standard for the american population according to the study by Wang et al. (2018), considering low handgrip strength, percentile values lower than 10, according to gender and age; 3) Reference standard for the Brazilian population according to the study by Schluskel et al. (2008), also considering low handgrip strength values lower than 10, according to gender and age. The statistical program Statistical Package for the Social Sciences (SPSS) version 26.0 used for statistical analyses. The Kolmogorov Smirnov test was used to assess the normality of the variables. For agreement analysis, the kappa coefficient was used. The statistical significance considered was $p < 0.05$.

Results: The sample consisted of 112 participants, mean age 68.45 ± 6.52 years old, dialysis time 22.39 ± 46.45 months, 67.00% (n=75) men, 33.00% (n=37) women. The most common cause of kidney disease was diabetic nephropathy in 45.53% (n=51) subjects. The body mass index of all participants ranged from 15.34 to 37.40 kg/m². The diagnosis of reduced handgrip strength in the sample, according to EWGSOP (2019), Wang et al. (2018) and Schluskel et al. (2008) was 66.10%, 37.50% e 63.40%, respectively. The reference standard by Wang et al. (2018) and Schluskel et al. (2008) showed

moderate agreement ($\kappa = 0.448$, $p < 0.001$). The concordance between EWGSOP (2019) and Wang et al. (2018) was also moderate ($\kappa = 0.471$, $p < 0.001$). Between EWGSOP (2019) and the study by Schluskel et al. (2008) substantial agreement was observed ($\kappa = 0.785$, $p < 0.001$).

Conclusion: EWGSOP (2019) and Schluskel et al. (2008) showed good agreement for diagnosing reduced handgrip strength in elderly patients undergoing hemodialysis.

Implications: the reduction in handgrip strength has a negative impact on elderly patients with chronic kidney disease. It's a tool not influenced by volume changes and is necessary to diagnose sarcopenia in this population.

Keywords: Renal dialysis, Renal insufficiency, Muscle strength

Conflict of interest: The authors declare no conflict of interest.

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CARDIORESPIRATORY RESPONSE IN POST-COVID VOLUNTEERS ACCORDING TO THE VENTILATORY SUPPORT RECEIVED IN THE ACUTE PHASE: CROSS-SECTIONAL STUDY

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Background: The assessment of functional capacity in volunteers with post-covid syndrome has become an important issue to estimate functional consequences, disability and physiological responses to exercise. Our hypothesis is that patients show different cardiorespiratory responses to the 1-minute sit and stand test (1STS) according to the ventilatory support received in the acute phase of the disease.

Objectives: To compare the initial cardiorespiratory responses by 1STS of patients from the "Post-covid life" study according to the ventilatory support received in the acute phase of the disease.

Methods: Cross-sectional observational study with post-covid volunteers with different severities of both sexes, adults, recruited between June 2020 to October 2022 to a Physiology Laboratory of UnB. For comparison the volunteers were divided into 3 groups according to the respiratory support received in the acute phase, being: no respiratory support (SSR), oxygen therapy (O2) and mechanical ventilation (MV). They were evaluated by 1STS according to the pre-established protocol, including recording heart rate, perception of effort before and after the test and number of repetitions performed. Statistical analyses were performed using the Statistical Package For The Social Sciences (SPSS), version 20. The Kolmogorov Smirnov test was used to evaluate the normality of the variables. The ANOVA test for unreplicated measures and the Kruskal Wallis test were used for intergroup comparisons, considering $p < 0.05$ statistically significant. Registration number: NCT04595097.

Results: We included 75 participants, 56% female, mean age 53.3 ± 11.6 years, BMI 31.2 ± 6.1 kg/m², hospitalization 20.1 ± 17.8 days, 74% sedentary and 18% previously active. The number of repetitions was 21.3 ± 9.4 , 19.5 ± 5.9 and 21.6 ± 7.4 for SSR, O2 and MV groups respectively. The volunteers had a mean HR pre of 79.5 ± 11.0 , 83.3 ± 12.6 and post of 85.6 ± 14.6 , 92.2 ± 16.0 , 101.3 ± 16.4 and 105.2 ± 18.7 beats for the SSR, O2 and MV groups. The pre-BORG of the SSR, O2, and MV groups were 9.1 ± 2.8 , 9.7 ± 2.8 , and 8.3 ± 8.0 , and post 12.1 ± 3.3 , 14.2 ± 2.6 , and 13.0 ± 2.7 . Although the number of repetitions showed no difference between groups ($p > 0.05$), HR and BORG were higher in the MV group compared to the others ($p < 0.005$).

Conclusion: Although the number of repetitions obtained by 1STS did not vary according to the ventilatory support received in the acute phase of COVID 19, the cardiorespiratory adjustments were greater in the volunteers submitted to MV compared to those who used O2 and SSR, suggesting greater deconditioning.

Implications: The results suggest that 1STS with HR monitoring and BORG is a functional test capable of assessing cardiorespiratory adjustments in post-covid patients.

Keywords: Physical exercise, COVID-19, Rehabilitation

Conflict of interest: The authors declare no conflict of interest.

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Ethics committee approval: The present study was approved by the ethics in research council of the institution Universidade de Brasília Faculdade de Ceilândia and is registered under number CAAE: 35706720.4.0000.8093.

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PROFILE OF HOSPITALIZED ELDERLY PEOPLE: CARDIAC AUTONOMIC CONTROL, FUNCTIONAL CAPACITY, PERIPHERAL MUSCLE STRENGTH, INDEPENDENCE, AND MORTALITY

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Background: Population aging is accompanied by multimorbidities and several systemic changes, such as cardiovascular, functional and strength, which can result in recurrent hospitalizations. In it, functional alterations of pre-existing strength and independence are potentiated, increasing dependence, loss of function and prolonged hospitalization. Identify the profile of the elderly in terms of these variables allows directing effective interventions in search of major complications.

Objectives: To evaluate cardiac autonomic control, functional capacity, peripheral muscle strength and independence for activities of daily living (ADL), and the relationship between these variables and the risk of mortality in hospitalized elderly.

Methods: Observational, cross-sectional study carried out in a university hospital. Elderly >60 years old, with preserved cognition and hemodynamically stable, were included. Lowered level of consciousness, acute respiratory failure, unstable vital signs, dyspnea on minimal exertion and sepsis were exclusion criteria. The Charlson Comorbidity Index was applied, and the following evaluations were performed: records of the R-R intervals for analysis of heart rate