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EFFECT OF PROPRIOCEPTIVE TRAINING ON THE MUSCLE STRENGTH OF INDIVIDUALS WITH ACUTE POST-COVID-19 SEQUELATES: RANDOMIZED CONTROLLED CLINICAL TRIAL

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Background: COVID-19, a disease resulting from infection by the SARS-CoV-2 virus, which can determine several sequelae, including a significant physical-functional deficit. In this sense, rehabilitation becomes essential and part of the recovery process of affected individuals, regardless of the severity of the clinical presentation. Proprioceptive training can increase the effectiveness of rehabilitation for these patients, as it is a combination of balance training and functional capacity training, promoting important results.

Objectives: To verify the effect of proprioceptive training on the muscle strength of individuals with acute post-COVID-19 sequelae.

Methods: Randomized controlled clinical trial. The volunteers were divided into 2 groups: Intervention Group (IG=28) and Control Group (GC=27). Three assessments were performed: initial assessment (T0), reassessment (T1) in the 6th session, and reassessment in the 12th session (T2). Sociodemographic data, muscle strength of the upper limbs by manual dynamometry and lower limbs by measuring functional mobility through the Timed Up and Go Test (TUG) were collected. The intervention program lasted 6 weeks, including physical training (twice a week for 60 minutes), divided into five phases: warm-up (10 minutes) involving joint mobility, stretching and breathing techniques; resistance training (20 minutes) walking; strength training (10 minutes) consisting of 7 exercises, with 2 sets of 10 repetitions for upper and lower limb muscle groups, using elastic bands, weights, graded according to the patient's capacity; balance training (10 minutes) consisting of static and dynamic exercises organized in 4 levels; and post-workout (10 minutes) composed of effort similar to warm-up. Descriptive statistics of the results were performed in the form of graphs of mean and standard deviation, for qualitative variables. When comparing manual dynamometry and TUG, an intention-to-treat analysis approach was used.

Results: In manual dynamometry, it was observed that the GI presented 35.4±3.00kgf (MSE) in (T0) and 37.05±11.249kgf (MSE) in (T2). Regarding the performance in the TUG, in the GI individuals there was an improvement that varied from 7.67 seconds (T0) to 6.775 seconds (T2).

Conclusion: Individuals submitted to 6 weeks of proprioceptive training, showed an increase in the muscle strength of the UL and LL.

Implications: These data are important to better prevent functional repercussions in COVID-19 survivors; showing the benefits of proprioceptive training in gaining muscle strength and improving functional capacity inherent to rehabilitation programs for this population.

Keywords: COVID-19, Proprioceptive Training, Muscle strength

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

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PSYCHOSOCIAL FACTORS INFLUENCE CRANIOFACIAL PAIN EXPERIENCED WITHIN 24 HOURS: CROSS-SECTIONAL STUDY

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Background: Craniofacial pain is among the most prevalent in the world. Due to multiple etiologies and factors, such as temporomandibular disorders, toothaches, and headaches. Craniofacial pain can negatively impact body functions and structures, resulting in activity limitations and participation restrictions. Young adult women are the most affected and, many times, their social participation, such as study or work, can be limited by this painful condition.

Objectives: To determine the main factors that influence the intensity and duration of pain in people who have had craniofacial pain in the last 24 hours.

Methods: This is a cross-sectional study that followed the STROBE recommendations. The research was disseminated through advertisements on social networks. A convenience sample was obtained, including volunteers aged between 18 and 40 years, university students of both sexes, with self-reported complaints of pain in the craniofacial region. A questionnaire prepared by the research team was applied, in addition to seven objective questions from the Brief Illness Perception Questionnaire (Brief IPQ). A two-step analysis was performed to determine the factors that significantly influenced pain intensity and duration: in the first, a simple linear regression, and in the second, a multiple regression model based on the R² value.

Results: Eighty-seven volunteers, whose average age was 23 years, were included in the study. Among those included, 72 (82.75%) were women. In the present study, it was observed that the intensity and duration of pain felt in the last 24 hours are influenced by concern about the disease and thoughts related to the treatment of the disease, showing the influence of psychosocial aspects on pain perception. Pain intensity was associated with the importance the patient gives to the treatment and the patient's concern about their pain (p<0.05). The duration of pain was associated with the individual's concern about their disease (p<0.05).

Conclusion: According to data found in this study, thoughts related to treatment and concern about the disease reported by patients may be predictive factors for pain intensity and duration.

Implications: According to data found in this study, thoughts related to treatment and concern about the disease reported by patients may be predictive factors for pain intensity and duration.

Keywords: Facial Pain, Psychosocial Functioning, Students, Pain Perception

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