sleep quality at hospitalization was associated with a lower PPT in the affected-side upper trapezius three months post-injury. A moderate negative correlation was also observed between the PPT of the affected-side ($r = -0.5$, $p = 0.04$) and contralateral upper trapezius ($r = -0.5$, $p = 0.02$) and LANSS scores, suggesting that higher LANSS scores at hospitalization were associated with lower PPT in both the affected and unaffected upper trapezius three months post-injury. No correlation was found with PPT measured in the tibialis anterior.
Conclusion: Higher LANSS scores and worse PSQI scores were associated with lower PPT three months post-injury. Lower PPT also correlated with higher LANSS and PSQI scores during hospitalization.
Implications: Although the study presents interesting results and is longitudinal, the sample size (n) is insufficient for more robust analyses, considering other variables and possible confounding factors.
Keywords: arm injuries, fractures, neuropathic pain

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BRAZILIAN VERSION OF THE ACTIVITY PATTERNS SCALE: TRANSLATION INTO BRAZILIAN PORTUGUESE AND CULTURAL ADAPTATION

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Background: Chronic pain significantly affects the physical and psychological functionality of individuals. The lack of accurate tools to measure different activity patterns highlights the need for more effective instruments to assess activity management in patients with chronic pain. The Activity Patterns Scale (APS) is a 24-item instrument that evaluates eight constructs related to physical activity. However, it has not yet been translated, adapted, or validated for Brazil. A culturally adapted version of this instrument is important for a more accurate assessment of chronic pain.
Objectives: Translate and adapt the language of the APS questionnaire into Brazilian Portuguese.
Methods: This is a cross-sectional study. For the translation and adaptation of the APS, the recommendations of Beaton et al. (2000) were followed. This study was approved by the Ethics Research Committee. The original version of the APS was translated by two Brazilian translators fluent in Spanish. The translations were then synthesized and subsequently back-translated into Spanish by two native Spanish speakers. A panel of experts reviewed the versions and compared them with the original to formulate the pretest version. The comprehensibility of the items in the pretest version was evaluated in 30 participants, both sexes, aged over 18 years, with chronic musculoskeletal pain in the lower back for at least 3 months and an intensity greater than 3 on the 11-point numerical pain scale. Each participant answered the questionnaire, reported their understanding, and suggested modifications. The instrument was considered adequate when 90% of participants understood all the questions. Statistical analyses were performed using Excel™ software (Microsoft, version 2019).
Results: In the translation and back-translation processes, no significant differences were identified between the versions, ensuring semantic and conceptual equivalence. The original, translated, and synthesized version were reviewed by the expert committee, and the pre-testing version was created. The pre-testing version was sent to the authors of the original APS who approved and did not suggest changes. Thirty patients participated in the study, with a mean age of 36.3 ± 17.35 years. The sample consisted of 19 women and 11 men, with a mean body mass index of 25.78 ± 4.58 kg/m2. The majority of participants (73.33%, n = 22) had a higher education level. The participants demonstrated a 90% level of understanding, meeting the established criterion for adequate comprehensibility.
Conclusion: The Portuguese version of the APS was translated and adapted, being clear, with satisfactory comprehensibility, and suitable for assessing individuals with chronic pain.
Implications: The Brazilian version of the APS will be an important tool for the assessment of musculoskeletal chronic pain in Brazil. Additional studies on its measurement properties should be conducted, which will provide important information to support the use of APS in clinical practice and research.
Keywords: Assessment instrument, Chronic pain, Physical activity

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PARTIAL VASCULAR OCCLUSION OR RESISTED EXERCISES ON PAIN, FUNCTIONAL CAPACITY, POSTURAL CONTROL, MUSCLE ACTIVATION, AND QUADRICEPSS STRENGTH IN PATELLOFEMORAL PAIN

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Background: The treatment of patellofemoral pain (PFP) is predominantly conservative, with an emphasis on exercises for quadriceps strengthening. However, one of the challenges in rehabilitation is the pain experienced during the execution of these exercises, as well as the difficulty in progressing with load. In this context, Partial Vascular Occlusion (PVO) emerges as a promising strategy, as it enables improvements in strength and hypertrophy with less overload.
Objectives: To evaluate the effect of PVO or resisted exercises for quadriceps strengthening on pain, functional capacity, postural control, activation, and quadriceps strength in women with patellofemoral pain.
Methods: A randomized clinical trial, with a blinded evaluator, approved by the ethics committee (Opinion 4.062.833) and registered at Clinical Trials. The sample consisted of 24 women, aged 18 to 45 years, diagnosed with patellofemoral pain. Participants were randomized into two groups: Group 1 (G1; N = 12), who performed resisted exercises with an external load of 20% of their body weight, and Group 2 (G2; N = 12), who performed exercises without additional load, with PVO applied to the proximal region of the thigh, at a pressure of 200 mmHg. All participants were evaluated before the intervention, immediately post-intervention, and at a four-week follow-up. The outcomes analyzed were pain (visual analogue pain scale), functional capacity (Anterior Knee Pain Scale and Lysholm

Knee Scoring Scale), postural control during stair ascent and descent (force platform), quadriceps muscle activation (electromyography), and quadriceps strength (isometric dynamometer). Both groups performed the same exercises: bilateral squats, lunges, single-leg squats, and at the fourth week, single-leg squats on an inclined platform (25°), executed at the participant's most comfortable angle. Three sets of each exercise were performed, with up to 15 repetitions per set, over 12 sessions, twice a week, for a total treatment duration of six weeks. Statistical analysis was conducted using intention-to-treat analysis, effect size calculation, and generalized estimating equations (GEE) model. A generalized estimating equation (GEE) model, using specific syntax, was employed to compare the variables of anxiety and sleep. Multiple comparisons were conducted using the Bonferroni post hoc test. All analyses were performed using IBM-SPSS software, with a significance level set at 5%.
Results: Initially, the groups did not show differences in age, body mass index, physical activity level, or pain level ($P > 0.05$). Pain, functional capacity, postural control, and muscle strength were similar between the groups at all three assessment points ($P > 0.05$), with improvements in pain and functional capacity after treatment ($P < 0.05$; $d > 1$). Muscle activation results were inconclusive, G1 showed less activation of the rectus femoris and greater activation of the vastus medialis at follow-up. No differences in pain during exercise execution were found ($P = 0.79$).
Conclusion: The results indicate that treatment protocols for PFP using PVO or resisted exercises with an external load of 20% of body weight similarly improved pain and functional capacity.
Implications: The use of PVO and resisted exercises proved to be effective therapeutic options for improving pain and functional capacity in women with patellofemoral pain.
Keywords: Patellofemoral pain, Vascular Occlusion, Exercise

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EFFECT OF THE MAT PILATES METHOD ASSOCIATED WITH FRENCH AURICULOTHERAPY IN POST-COVID-19 PATIENTS — A RANDOMIZED CLINICAL TRIAL

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Background: Post-COVID-19 syndrome is characterized by the persistence of symptoms for more than three months after infection, affecting multiple body systems.
Objectives: To evaluate the effects of Pilates and auriculotherapy on body image, cardiac autonomic function, energy profile, anxiety, brain electrical activity, sleep quality, and quality of life in post-COVID-19 patients.
Methods: The sample included 25 volunteers with post-COVID-19 syndrome. Functionality was assessed using the post-COVID-19 Functional Status (PCFS) Scale, body image with the Body Dysmorphic Disorder Examination (BDDE), sleep quality with the Pittsburgh Sleep Quality Index (PSQI), quality of life with the WHOQOL-BREF, and anxiety with the State-Trait Anxiety Inventory (STAI) and salivary amylase levels. Cardiac autonomic function, energy profile, and brain waves were also evaluated. The Pilates Group (PG) performed Mat Pilates twice a week for 50 minutes over five weeks. The Pilates and Auriculotherapy Group (PAG) followed the same protocol, with the addition of weekly auriculotherapy sessions.
Results: A reduction in body dissatisfaction was observed in the Pilates group, as well as a decrease in anxiety levels and a positive impact on heart rate variability, suggesting improved autonomic balance. Quality of life improved in the group that combined both interventions. Although sleep quality and salivary amylase levels did not show statistical significance, changes in brain electrical activity and energy profile reinforce the positive effects of the applied therapies.
Conclusion: This study demonstrated that, although the Pilates Group showed more evident and significant results in several variables, the combination of Pilates with Auriculotherapy also provided benefits, albeit in a more subtle manner. These two approaches can indeed be complementary, as both aim to promote the physical and emotional balance of post-COVID-19 patients. However, the results suggest that the combined intervention did not have as strong an impact as Pilates alone, highlighting the need for further research with larger samples.
Implications: This study contributes to the understanding of the effects of Pilates and Auriculotherapy in the post-COVID-19 context but also highlights the need for future research with larger samples to further explore the potential of these combined therapies and their implications for patient rehabilitation.
Keywords: Body Image, Pilates Method, Auriculotherapy

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CONSTRUCT VALIDITY AND RESPONSIVENESS OF THE DA PAIN CATASTROPHIZING SCALE IN INDIVIDUALS WITH ROTATOR CUFF-RELATED SHOULDER PAIN

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Background: Rotator cuff-related shoulder pain (RCRSP) is a common complaint in the general population. Pain catastrophizing plays a crucial role in the experience and management of chronic musculoskeletal pain, including rotator cuff-related shoulder pain (RCRSP). The Pain Catastrophizing Scale (PCS) is widely used to assess catastrophic thinking related to pain, but its construct validity and responsiveness in individuals with RCRSP require further investigation.
Objectives: To evaluate the construct validity and responsiveness of the PCS in individuals with RCRSP.
Methods: This was a cross-sectional study approved by a research ethics committee. This study included individuals aged 18 years or older, with shoulder pain for at least 3 months, and pain intensity of 3 or higher on an 11-point numerical rating pain scale (NPRS) during arm elevation. The construct validity was analyzed through hypothesis testing. This study hypothesizes that the rumination, magnification, and helplessness subscales and total score of PCS are moderately ($r > 0.40$) and positively associated with pain intensity,