

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,