

patients. However, the correlation between pain and anxiety after PBM treatment remains poorly understood. This study aimed to investigate whether PBM laser auriculotherapy can alter the relationship between pain and anxiety in TMD patients.

Objectives: The study aimed to evaluate the correlation between pain and anxiety symptoms in TMD patients after PBM laser auriculotherapy.

Methods: This randomized, controlled crossover trial involved 22 TMD patients assigned to either the Experimental Group (EG) or Placebo Group (PG). PBM treatment was administered twice a week for 4 weeks. The EG received active PBM treatment, while the PG received sham treatment. Pain was assessed using the Chronic Pain Disability Scale (CPDS), and anxiety was evaluated using the Generalized Anxiety Disorder Scale (GAD-7). Data were analyzed using Spearman's correlation test.

Results: In the PG, there was a significant positive correlation between pain and anxiety symptoms ($r = 0.67$, $p = 0.01$). In contrast, no significant correlation was observed in the EG ($r = 0.34$, $p = 0.12$).

Conclusion: The results suggest that PBM laser auriculotherapy may reduce the correlation between pain and anxiety in TMD patients. The significant correlation in the placebo group supports this possibility, but further research is needed to confirm these findings.

Implications: These findings indicate that PBM laser auriculotherapy might help break the cycle of pain and anxiety in TMD patients. Additional studies are necessary to confirm the efficacy of PBM in managing both pain and anxiety.

Keywords: Anxiety, Rehabilitation, Laser Therapy

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EFFECTS OF BLOOD FLOW RESTRICTION ON PAIN IN PATIENTS WITH KNEE OSTEOARTHRITIS DURING ONE-MONTH INTERVENTION: A RANDOMIZED CLINICAL TRIAL

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Background: Physical exercises are strongly recommended for the treatment of knee osteoarthritis (KOA). However, when subjected to loads that overload the joint, these individuals may experience worsened symptoms and low adherence to treatment. Evidence shows that exercises combined with Blood Flow Restriction (BFR) allow for strength and muscle endurance gains using lighter loads. Therefore, it is necessary to investigate whether this method can

help patients reduce pain and joint discomfort as effectively as exercises with heavier loads.

Objectives: To assess the efficacy of 40% occlusion with blood flow restriction in improving pain in patients with knee osteoarthritis.

Methods: Clinical study with 16 patients (12 women, 4 men; average age $51.31 \pm (9.1)$ years), divided into three groups: 40% BFR + Rest ($n = 4$), 40% BFR + Low Load ($n = 6$), and HIRE (High Intensity Resistance Exercise) + Placebo ($n = 6$). Pain was assessed before and after one month using the Visual Analog Scale (VAS).

Results: Regarding the initial pain scale, the averages were: 3.5 ± 3.3 for the 40% BFR + Rest group, 6 ± 3.16 for the 40% BFR + Low Load group, and 3.83 ± 3.25 for the HIRE + Placebo group. Regarding the final pain scale, the averages were: 3 ± 3.4 for the 40% BFR + Rest group, 4 ± 3.87 for the 40% BFR + Low Load group, and 0.6 ± 1.21 for the HIRE + Placebo group. Thus, when evaluating pain levels before and after one month of treatment, the 40% BFR + Rest group showed a pain reduction of approximately 14% on average, while the 40% BFR + Low Load group demonstrated a reduction of around 33%, and the HIRE + Placebo group reduced the average by about 84%, indicating a greater improvement in pain compared to the 40% BFR + Rest and 40% BFR + Low Load groups.

Conclusion: Thus, it is concluded that all groups showed improvement in the investigated outcome, but the group using high loads (HIRE + Placebo) still appears to be more effective in reducing knee pain in patients with osteoarthritis.

Implications: It is expected that the results of this clinical study will clarify the applicability and implementation of 40% BFR in the rehabilitation of OA.

Keywords: Pain, Knee Osteoarthritis, Blood Flow Restriction Therapy

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

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ASSESSMENT OF EMOTIONAL ASPECTS, PAIN SELF-EFFICACY AND FUNCTIONAL PERFORMANCE IN VERTICAL JUMP IN WOMEN WITH PATELLOFEMORAL PAIN SYNDROME

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Background: Patellofemoral pain syndrome (PFPS) primarily affects females, characterized by intermittent episodes exacerbated during functional activities, particularly eccentric actions like jumping. Its etiology remains incompletely understood, but biomechanical alterations in the lower limbs, neuromuscular control deficits, and psychosocial influences such as kinesiophobia and hyperalgesia may contribute to symptom onset or intensification. Understanding factors beyond biomechanical aspects, including psychosocial characteristics of individuals with PFPS, could optimize physiotherapy assessment and intervention strategies.

Objectives: To compare aspects related to pain perception, self-efficacy, emotional states, and functional performance in subjects with and without patellofemoral pain syndrome.

Methods: This study is a cross-sectional study in which one hundred women aged 18 to 30 years, with and without anterior knee pain, were evaluated. Participants were divided into two groups: the