
Effects of Kinesiotaping on Symptoms, Functional Limitations and Underlying Deficits of Individuals With Rotator Cuff Tendinopathy: A Single-Blind, Randomized Controlled Trial

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Objective: To determine the effectiveness and benefits, in the mid- and long-term, of therapeutic kinesiotaping, added to a 6-week rehabilitation program in reducing symptoms, functional limitations and underlying deficits related to shoulder control of individuals with rotator cuff tendinopathy (RCTe).

Study design: A single-blind, randomized controlled clinical trial.

Subjects: Fifty-two participants (30 men, 22 women; age: 30.1 ± 8.3 years; height: 1.75 ± 0.11 m; body mass: 73.8 ± 13.9 kg) clinically diagnosed with unilateral RCTe.

Intervention: Participants were randomly assigned to one of 2 treatment groups [Kinesiotaping (KT, experimental); and No kinesiotaping (NoKT, control)]. All participants attended a rehabilitation program composed of 10 physiotherapy sessions over a 6-week period. Kinesiotaping was added to the rehabilitation program of KT group.

Outcome Measures: Symptoms and functional limitations were assessed by Disabilities of the Arm, Shoulder, and Hand (DASH) questionnaire, Brief Pain Inventory (BPI) and Western Ontario Rotator Cuff (WORC) index at 4 time-points (baseline, week-3, week-6, and week-12). Underlying deficits included shoulder pain-free and full range of motion (ROM) in frontal and sagittal planes, measured using a universal goniometer, and acromiohumeral distance (AHD) at rest and 60 degrees shoulder abduction measured using an ultrasound scanner. The secondary outcomes were evaluated pre- and post-treatment (baseline and week-6). The evaluator was blinded to the group assignment, whereas participants were blinded to the treatment provided to the other group.

Results: Both groups presented similar improvements at week-3, week-6, and week-12 compared to baseline values. However, there was no significant difference between groups in terms of improvement of symptoms, functional limitations, pain-free ROM, full ROM, and AHD. Multiple analysis of variance (MANOVA) for repeated measures revealed no interactions among the factors included in all outcomes ($P > 0.05$).

Conclusions: Whereas symptoms, functional limitations, ROM, and AHD improved in both KT and control group, there was no difference between groups in the mid- and long-term. Kinesiotaping did not provide additional benefits for individuals with RCTe at mid and long-term. Therefore, the results of our study do not support the addition of kinesiotaping to a 6-week rehabilitation program for improving symptoms, functional limitations and underlying deficits of symptomatic individuals with RCTe.