

Efficacy of Functional Fascial Taping for the Treatment of Non-Specific Low Back Pain: a Prospective Randomized Controlled Trial

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BACKGROUND

Non-specific low back pain (NSLBP) is a common musculoskeletal disorder with high lifetime prevalence. When the pain experienced becomes recurrent or persistent, individuals have physical and psycho-social problems that result in personal and societal economic burdens. As pain can inhibit muscle function and disturb motor control, controlling pain can ameliorate these consequences. Functional Fascial Taping (FFT) is an innovative taping method that is proposed to immediately relieve pain and, as a consequence, increase functional movement. This randomized, double-blinded controlled trial aimed to compare the effectiveness of FFT to placebo taping in the short-term (two-week intervention) and medium-term (24-week follow-up) in participants with non-acute NSLBP.

METHODS

Participants with NSLBP (duration more than 6 weeks or recurrent episodes of LBP) and with a difficulty bending forward were recruited from the local community and randomized into either FFT group (n=21) or placebo group (n=22). Participants received taping 4 times during a two-week intervention. The primary outcome measures (including pain intensity using a 100-mm VAS and function using modified Oswestry Disability Questionnaire) and secondary outcome measures (Fear-Avoidance Beliefs Questionnaire; FABQ and SF-36) were assessed at baseline, after the 2-week intervention and follow-up (6, 12, and 24 weeks).

RESULTS

At the two-week intervention, the FFT group demonstrated a significant reduction in pain intensity compared to placebo taping ($p = 0.02$). There was no significant difference in the change of pain intensity between the two groups at 6, 12, and 24-week follow-up. The FFT group showed a trend with a statistical difference ($p = 0.054$) compared to the placebo group after the 2-week intervention. The minimal clinically meaningful change (MCMC) in pain intensity and function was attained earlier in the FFT group than the placebo group (at the two-week intervention and the effects maintained up to the 24-week follow-up). There was no significant difference between the two groups in the change of FABQ and SF-36.

CONCLUSIONS

These findings suggest that Functional Fascial Taping (FFT) is an easy and quick way to relieve pain and can be an adjunct to exercise prescription to encourage individuals to return to normal functional activity.