

## The Effect of Positional Release Technique versus Kinesio Tape on Iliocostalis lumborum in Back Myofascial Pain Syndrome

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**Abstract :** Purpose: The purpose of this study was to compare the effects of Positional Release Technique versus Kinesio Tape on pain level, pressure pain threshold level and functional disability in patients with back myofascial pain syndrome at iliocostalis lumborum. Backgrounds/significance: Myofascial Pain Syndrome is a common muscular pain syndrome that arises from trigger points which are hyperirritable, painful and tender points within a taut band of skeletal muscle. In more recent literature, about 75% of patients with musculoskeletal pain presenting to a community medical centres suffer from myofascial pain syndrome. Iliocostalis lumborum are most likely to develop active trigger points. Subjects: Thirty patients diagnosed as back myofascial pain syndrome with active trigger points in iliocostalis lumborum muscle bilaterally had participated in this study. Methods and materials: Patients were randomly distributed into two groups. The first group consisted of 15 patients (8 males and 7 females) with mean age 30.6 ( $\pm 3.08$ ) years, they received positional release technique which was applied 3 times per session, 3/week every other day for 2 weeks. The second group consisted of 15 patients (5 males, 10 females) with a mean age 30.4 ( $\pm 3.35$ ) years, they received kinesio tape which was applied and changed every 3 days with one day off for a total 3 times in 2 weeks. Both techniques were applied over trigger points of the iliocostalis lumborum bilaterally. Patients were evaluated pretreatment and posttreatment program for Pain intensity (Visual analogue scale), pressure pain threshold (digital pressure algometry), and functional disability (The Oswestry Disability Index). Analyses: Repeated measures MANOVA was used to detect differences within and between groups pre and post treatment. Then the univariate ANOVA test was conducted for the analysis of each dependant variable within and between groups. All statistical analyses were done using SPSS. with significance level set at  $p < 0.05$  throughout all analyses. Results: The results revealed that there was no significant difference between positional release technique and kinesio tape technique on pain level, pressure pain threshold and functional activities ( $p > 0.05$ ). Both groups of patients showed significant improvement in all the measured variables ( $p < 0.05$ ) evident by significant reduction of both pain intensity and functional disability as well as significant increase of pressure pain threshold. Conclusions : Both positional release technique and kinesio taping technique are effective in reducing pain level, improving pressure pain threshold and improving function in treating patients who suffering from back myofascial pain syndrome at iliocostalis lumborum. As there was no statistically significant difference was proven between both of them.

**Keywords :** positional release technique, kinesio tape, myofascial pain syndrome, Iliocostalis lumborum

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