DOI: 10.7860/JCDR/2025/80480.22649

Efficacy of Core Stability Exercises with Kinesio 'I' And 'Y' Taping on Pain and Quality of Life in Individuals with Chronic Non-Specific Low Back Pain: A Case Series

DEEPANNITA AWASTHI[1*], DIGVIJAY SHARMA[2]

ABSTRACT

Chronic Non-specific Low Back Pain (CNSLBP) is among the most common musculoskeletal disorders reported worldwide. It is a principal factor contributing to pain, disability, and impairment globally. Acute or chronic lumbar diseases can also influence the structure and functioning of the body, directly leading to reduced muscle strength, endurance capacity, and ability to perform all daily activities (ADL). Core stability exercises enhance pain management, muscular strength, and spinal stability while substantially aiding neuromuscular control in the lumbar region. Kinesio taping, a therapeutic modality, alleviates pain and enhances muscle function by carefully aligning the tissue.

This study aims to investigate and determine pre-post improvement in Kinesio 'I' and 'Y' taping with core stability exercise and determine the better significant difference in the treatment. The study evaluates the combined effect of core stability exercise with Kinesio 'I' and 'Y' taping on pain and quality of life in patients experiencing CNSLBP.

Four elderly patients, as per the inclusion criteria were selected for treatment, three females and one male with CNSLBP underwent treatment core stability exercises with Kinesio taping, which were regularly given three times a week till a 4-week allergic test was done prior to the treatment, and then taping was applied to the patient. The pain and quality of life were assessed by 11-point Numerical Pain Rating Scale (NPRS) and Short Form 36 (SF-36) respectively.

The intervention leads to a considerable pain reduction from the baseline score (pre-treatment), from 5.50±1 to 2.75± 1.50 with a (p-value <0.05), indicating statistical significance. T-test score = 11 of this case series demonstrates significant improvement in pain intensity, and significant improvements were seen in the SF-36 score post-treatment (p< 0.05) in quality of life.

This case series indicates that taping with core stability exercise may effectively manage CNSLBP. Nevertheless, additional research with a larger sample size must determine effectiveness conclusively.

keywords: Neuromuscular control, Numeric pain rating scale, Short form-36

PARTICULARS OF CONTRIBUTORS:
1. Doctoral Student, School of Health Sciences, Chhatrapati Shahu Ji Maharaj University, Kanpur, Uttar Pradesh, India - 208024.
2. Associate Professor & Director, School of Health Sciences, Chhatrapati Shahu Ji Maharaj University, Kanpur, Uttar Pradesh, India - 208024.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:
*Deepannita Awasthi
School of Health Sciences, Chhatrapati Shahu Ji Maharaj University, Kanpur, Uttar Pradesh, India - 208024.
E-mail: phd202300002006@csjmu.ac.in