## Effectiveness of Integrated Soft Tissue Mobilization on the Functional Outcome in Chronic Low Back Pain Patients

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## Abstract

The experimental study is aimed to analyze the effectiveness of integrated soft tissue mobilization on the pain, lumbar spine mobility and the outcome on functions in chronic low back pain (CLBP). Irrespective of low back pathologies, soft tissues are vulnerable for dysfunction and paves way for pain-spasm vicious cycle. Very few studies in CLBP are being performed to explore its effect and integrated approaches in soft tissue mobilization were not studied. Totally sixty participants were randomized into control and experimental groups in the present study. Baseline measurements of pain severity, lumbar spine mobility and Oswestry disability Index (ODI) were measured. The control group received treatment in the form of strengthening program and stretching maneuvers. The experimental group received the all form of soft tissue mobilization. After three weeks of follow up, all the measurements were taken again. The experimental group showed significant improvement as compared to the control group in terms of lumbar spine mobility, reduction of disability and moderate improvement in pain severity. This study adds the importance of integrated soft tissue mobilization in recovery from CLBP. It further establishes soft tissue mobilization as a part of functional mobilization in rehabilitating CLBP.

Keywords: chronic low back pain, soft tissue mobilization, lumbar spine mobility, ODI

## Introduction

The commonest symptom in musculoskeletal pathologies is low back pain and is considered as a most common health disorder in modern society. The wide variety causes include а of pathologies lumbar spine of and surrounding structures. Research by Anderson suggests that 70 to 85 % of the population will come across low back pain at least once in their lives. Almost 90% of the acute low back pain show better improvements regardless of the therapy; remaining 10% are prone to develop chronic low back pain. Overall 90% of social costs are accounted for low back disorders (Anderson, 1996). This is one of the causes for long term absenteeism from work (*Hazard*, 1996) increased loss of work, sickness compensation, long term disability for long periods, need for social support and a functional restoration programs.

Depending on the duration of symptoms, low back pain can be classified as acute, sub-acute or chronic. According to European guidelines, chronic low back pain is defined as low back pain and discomfort, located below the costal margin and above the inferior gluteal folds, with or without radiating leg pain, persisting for a minimum of 12 weeks (*Airaksinen*, 2004). The 2<sup>nd</sup> most known