

The Effect of Adding Fascial Manipulation® to the Physical Therapy Plan of Care for Low Back Pain Patients

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PURPOSE Evaluate the pain and function outcomes when Fascial Manipulation® (FM) is combined to standard physical therapy (SPT).

METHODS A pragmatic experimental time series between two outpatient convenience samples. Patients were referred to physical therapy by a medical physician and were randomized into SPT without FM and SPT with FM. Diagnosis ranged from low back pain/lumbago to failed back syndrome. Interventions for SPT without FM included thermal and/or electrical modality and therapeutic exercise in combination to mobilization, manipulation or traction. For the SPT with FM group, a certified instructor of the Fascial Manipulation Association, Arzignano (VI), Italy, provided FM interventions, in addition to the thermal and/or electrical modality and therapeutic exercise. Participants completed the Oswestry Disability Index (ODI), Numeric pain Rating Scale (NPRS) and Global Rating of Change (GROC) throughout the treatment.

RESULTS The SPT group had 10.3 ± 3.8 visits compared to 8.0 ± 3.8 visits that the FM group experienced ($p = 0.07$). The ODI decreased by at least 1 category in 50% of the SPT cases, while in 44% of the cases was no change. This was similar with the FM group (Pearson chi-square: $p = 0.5$) as 71% of the cases decreased and 24% did not change their category. When GROC values were analyzed for clinical significance, 56.3% of the subjects in the traditional group had values above 5 at the discharge, compared to 90.5% of the patients from the FM group (Pearson chi-square: $p = 0.01$). At discharge, the FM subjects had more than double the change in NPRS compared to SPT counterparts (-4.2 ± 2.1 to -1.4 ± 2.2 , $p = 0.001$). Overall, 95% of the subjects in the FM group decreased their NPRS by at least 2 points compared to 60% of the SPT group (Fisher's exact test: $p = 0.02$). Moreover, when data was analyzed based on NPRS change of at least 4 points, 62% of the FM patients experience the decrease compared to just 13% of the SPT patients (Pearson chi-square: $p = 0.004$).

CONCLUSIONS The application of FM to physical therapy clients with lumbar back symptoms results in significantly reduction in pain and disability. The mechanism of effectiveness could originate from the applied mechanical stimuli that alter the sliding of the thoracolumbar fascia.