Myofascial Release improves pain and disability in non-specific chronic low back pain: A Randomized Clinical Trial

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BACKGROUND: Despite its high prevalence, the etiology and the nature of chronic low back pain (CLBP) have not yet been fully understood. It has been suggested that soft tissues such as thoracolumbar fascia [1,2] and other lumbar muscles might be related to LBP [3,4]. Myofascial Release (MFR) is a form of manual medicine widely used by physiotherapists in the management of different musculoskeletal pathologies [5]. Up to this moment, no previous studies have reported the effects of an isolated MFR treatment in patients with CLBP. The purpose of this study is to investigate the effects of an isolate MFR protocol on pain, disability, and fear-avoidance beliefs in patients with CLBP.

METHODS: Fifty-four participants, with nonspecific CLBP, were randomized to MFR group (n=27) receiving four sessions of myofascial treatment, each lasting 40 minutes, and to control group (n=27) receiving a sham MFR. Variables studied were pain measured by means Short Form McGill Pain Questionnaire (SF-MPQ) and visual analog scale (VAS), disability measured with Roland Morris Questionnaire, and fear-avoidance beliefs measured with Fear-Avoidance Beliefs Questionnaire (FABQ). All variables were assessed at baseline, immediately after treatment (week 2), and at follow up (week 12).

RESULTS: Subjects receiving MFR displayed significant improvements at week 12 in pain (SF-MPQ) (mean difference -7.8; 95% confidence interval [CI]: -14.5 to -1.1, P=0.023) and sensory SF-MPQ subscale (mean difference -6.1; 95% CI: -10.8 to -1.5, P=0.011) compared to the sham group, but no differences were found in VAS between groups. Disability (mean difference -3.7; 95% CI: -7.6 to -0.2, P≤ 0.05) and the FABQ score (mean difference -13.5; 95% CI: -27.6 to 0.5, P≤ 0.05) also displayed a significant decrease in the MFR group at follow up, as compared to sham MFR.

CONCLUSIONS: The application of Myofascial Release Therapy reduces pain (SF-MPQ) and disability in patients with non-specific CLBP. Because the minimal clinically important differences in pain and disability are, however, included in the 95% CI, we cannot know whether this improvement is clinically relevant.

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