Mindfulness-Based Stress Reduction Improves Outcomes in Adults With Chronic Low Back Pain


Low back pain (LBP) is a clinically significant problem in the United States. As the leading cause of disability,1 the social and economic impact of LBP is staggering. Standard treatments rarely address the underlying cause of pain and have done little to slow this growing problem.2,3 Manual manipulation addresses structural dysfunction and is a recommended treatment for patients with LBP.4 However, psycho-social factors also play an important role in pain. Researchers from the Group Health Research Institute in Seattle, Washington, recently studied the effectiveness of mindfulness-based stress reduction (MBSR), a therapy that aims to increase one’s “awareness and acceptance of moment-to-moment experiences,” in managing chronic LBP. In this study, MBSR was compared with cognitive behavioral therapy (CBT) and usual patient care to assess whether MBSR is superior for improving pain and functional limitation.

Participants aged 20 to 70 years with 3 months or more of nonspecific LBP were recruited for this interviewer-blinded, randomized clinical trial. Exclusion criteria included LBP for less than 3 months, difficulty participating in classes, activity interference less than 3 (0-10 scale), pain bothersomeness less than 4 (0-10 scale), workers’ compensation or legal issues, and other specific diagnosis. The participants (N=342) were randomly assigned into the MBSR (n=116), CBT (n=113), or usual care groups (n=113). The MBSR (ie, yoga and mindfulness exercises) and CBT (ie, therapy focused on changing the patients’ relationship with pain) interventions had similar standardized formats, which included one 2-hour session per week for 8 weeks. Primary outcomes included the modified Roland Disability Questionnaire (RDQ; 0-23 scale), which measured functional limitation, and LBP bothersomeness in the past week (0-10 scale). Intention-to-treat analysis was used to assess primary outcomes at baseline and at 4, 8, 26 (primary end point), and 52 weeks.

Results revealed a clinically meaningful improvement in RDQ scores that was significantly different between groups at 26 weeks (P=.04). The MBSR (60.5%) and CBT (57.7%) groups showed significantly greater improvement on the RDQ over the usual care group (44.1%) (relative risk [RR] for MBSR vs usual care, 1.37 [95% CI, 1.06-
1.77] and CBT vs usual care, 1.31 [95% CI, 1.01-1.69]) with no statistically significant difference between MBSR and CBT groups. Clinically meaningful improvement of LBP bothersomeness was also notably different between groups at 26 weeks (P=.01). Participants in the MBSR (43.6%) and CBT (44.9%) groups demonstrated greater improvements in LBP bothersomeness than the usual care group (26.6%) (RR for MBSR vs usual care, 1.64 [95% CI, 1.15-2.34] and CBT vs usual care, 1.69 [95% CI, 1.18-2.41]), with no statistically significant difference between intervention groups. At 52 weeks, MBSR continued to have a statistically significant improvement in RDQ scores and LBP compared with usual care.

This clinical trial reveals that MBSR and CBT may be effective for managing chronic LBP and the associated functional limitations. Osteopathic medicine recognizes the value in addressing both mind and body when providing holistic patient care. This study provides evidence supporting the role of mind-body therapies in the treatment of patients with chronic pain. (doi:10.7556/jaoa.2016.094)

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References

Craniosacral Therapy Shown Beneficial in Management of Chronic Neck Pain


Physical therapy researchers used craniosacral therapy (CST) in the management of chronic neck pain at the Department of Internal and Integrative Medicine at the University of Duisburg-Essen in Essen, Germany. Inclusion criteria were “an age of 18 to 65 years; chronic nonspecific neck pain for 3 months or more with at least moderate pain intensity of 45 mm or higher on a 100-mm visual analog scale (VAS),” and no familiarity with CST. Exclusion criteria included specific neck pain due to degenerative disease (eg, disc prolapse), inflammatory disease (eg, spondylitis), neurologic disease (eg, neuropathy), physical trauma (eg, whiplash), neoplasms of the spine, severe psychiatric condition (eg, depression), pregnancy, or use of corticosteroids, opiates, or muscle relaxants.

Fifty-four participants were randomly assigned to the CST group (n=27) or the sham group (n=27). Both groups were told they would receive 1 of 2 CST techniques. Standardized treatment protocols consisted of 8 units of CST or sham once per week for 45 minutes each. The CST protocol included the following:

- frontal and parietal lift, medial compression of the parietal bones, release of the sagittal suture and atlanto-occipital joint, compression-decompression of the sphenosbasilar and temporomandibular joints, cranial base release, release of the hyoid diaphragm and the thoracic inlet, dural tube traction, respiratory and pelvic diaphragm release, lumbosacral and sacroiliac decompression, fascial unwinding of the neck/shoulder and lower limbs, and still point induction.

These procedures are familiar to those who use osteopathic cranial manipulative medicine (OCMM). The sham protocol comprised light touch to the same areas of the body to which CST was applied for 2 minutes each.