

Thirty-three participants were randomly allocated to either the OMTh group (n=16) or the exercise program group (n=17). Two to 3 weeks after the patients underwent lumbar microdiscectomy, they returned to the hospital for their first rehabilitation session. Both interventions consisted of eight 30-minute sessions performed twice per week for 4 weeks. All patients were prescribed anti-inflammatory medication, analgesics, and muscle relaxants by the surgeons. The OMTh intervention was performed by 2 foreign-trained osteopathic students supervised by a British-trained osteopath. This group received a standardized OMTh protocol including soft tissue, myofascial release, muscle energy, progressive inhibition of neuromuscular structures, osteopathic cranial manipulative medicine, and rib raising techniques. The exercise group also followed a protocol focused on stretching, strengthening, and Pilates exercises.

Outcome measures were assessed at baseline (2-3 weeks after surgery) and a week after the final rehabilitation session (7-8 weeks after surgery) using the Roland-Morris Disability Questionnaire and a visual analog scale. Postsurgical physical disability improvement was statistically significant in the OMTh rehabilitation group at 54% vs 26% in the exercise group ($P<.05$). Residual leg pain decreased by 53% in the OMTh group and 17% in the exercise group ($P>.05$), and residual low back pain decreased by 37% in the OMTh group and 10% in the exercise group ($P>.05$). In addition, patients required less frequent use of medications in the OMTh group ($P>.05$).

The authors concluded that OMTh as a postsurgical rehabilitation intervention after lumbar microdiscectomy is a feasible and potentially beneficial approach for improving physical function and residual back and leg pain, decreasing the frequent use of medications, and leading to overall patient satisfaction. A larger, randomized controlled trial using sham therapy is warranted. The use of OMTh as a postsurgical rehabilitation inter-

vention after knee and hip arthroplasty has been shown to be a feasible approach for improving postoperative care.^{3,4} This study further supports its utility as an adjunct therapy and a potential standardized protocol for postsurgical rehabilitation. (doi:10.7556/jaoa.2015.129)

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Bodywork Shown to Reduce the Symptoms of Chronic Constipation and Improve Quality of Life

Gürsen C, Kerem Günel M, Kaya S, Kav T, Akbayrak T. Effects of connective tissue manipulation on symptoms and quality of life in patients with chronic constipation: a randomized controlled trial [published online June 20, 2015]. *J Manipulative Physiol Ther*. 2015;38(5):335-343. doi:10.1016/j.jmpt.2015.06.003.

Turkish physical therapy researchers used a bodywork modality called connective tissue manipulation (CTM) in a randomized controlled trial on patients with chronic constipation. Researchers used Rome III criteria for chronic constipation to identify 50 patients and randomly assign them to the intervention group (n=25) or to the control group

(n=25). Patients in the intervention group received CTM and lifestyle advice (eg, increase fiber and water intake, increase exercise, take as necessary laxative and stool softeners), and patients in the control group received lifestyle advice. The Rome III criteria include at least 2 of 6 symptoms, such as having 3 or fewer bowel movements per week, straining during at least 25% of bowel movements, passing lumpy and hard stool in at least 25% of bowel movements, and experiencing incomplete evacuation at least 25% of the time.

Exclusion criteria were comorbid neurologic, anatomic, or metabolic condition; pregnancy; mental problems; history of colostomy surgery; history of gastrointestinal, spinal, or pelvic surgery except cholecystectomy, appendectomy or hysterectomy; history of bowel obstruction, perforation, or bleeding; or intestinal cancer.

The CTM protocol was based on the work of Holey¹ and was applied 5 days per week for 4 weeks by the same physiotherapist. The physiotherapist applied CTM to patients in a sitting position with cross-tissue engagement across prescribed areas of the sacrum, axial skeleton, ribs, and scapulae. To my knowledge, this CTM protocol is similar to deep tissue myofascial release and patissage. According to Holey,¹ this protocol addresses important reflex areas roughly equivalent to somatovisceral interactions as formulated by Korr.² Gürsen and colleagues reported that CTM potentially reduces sympathetic activity and increases parasympathetic activity, which improves circulation, thus “promoting the healing process.”

The primary outcome was measured using the Constipation Severity Instrument, and secondary outcomes were measured using the Patient Assessment of Constipation Quality of Life Questionnaire and Bristol Stool Scale. At baseline, there were essentially no differences between the groups on demographics or outcome measures.

The results revealed statistically significant improvement for the intervention group in overall

Constipation Severity Instrument score ($P<.001$), less colonic inertia ($P=.002$), improved bowel movement frequency ($P=.002$), shorter bowel movement time ($P=.004$), Bristol Stool Scale softer stools ($P=.005$), and improvements in Patient Assessment of Constipation Quality of Life Questionnaire in all dimensions ($P<.001$). Limitations were no blinding and use of 1 physiotherapist.

This article shows the benefit of manual therapy for patients with a systemic disorder and confirms my clinical experience in treating patients with irritable bowel syndrome and constipation, which has also shown benefit for bowel functions. Also, the proposed mechanism of action, based on osteopathic theory, in all likelihood also accounts for the benefit of osteopathic manipulative treatment observed in patients with postoperative ileus.²⁻⁴ (doi:10.7556/jaoa.2015.130)

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