on 23 healthy participants aged 27 to 69 years. In this study, 14 women and 9 men were randomly assigned to an intervention group (n=11) or a control group (n=12). Exclusion criteria were a history of known vertebral artery anomalies; hypoplasia or previous injury; undiagnosed dizziness; hypertension (≥140/90 mm Hg); head or neck trauma within the past 6 weeks; known upper or midcervical instability; recent cervical spine high-velocity, low-amplitude therapy; previous cervical spine surgery or cerebrovascular events of any kind; pregnancy; use of systemic steroids or anticoagulants; cancer; Down syndrome; Klippel-Feil syndrome; Erlos-Danlos syndrome; or if the atlantoaxial section of the vertebral artery could not be visualized on ultrasound.

The authors conclude that this finding adds to the building evidence for the safety of cervical spine manipulation with regard to vertebral artery derangement. As a contributor in the past decade to the American Osteopathic Association’s efforts to evaluate the safety and efficacy of cervical manipulation, I believe the safety issue is well established. (doi:10.7556/jaoa.2015.128)

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Osteopathic Manipulative Therapy Shows Promise for Improving Postdiskectomy Recovery


Lumbar discectomy is a common treatment for patients with low back pain because it can help reduce physical disability and relieve nerve root pain compared with other nonoperative treatments. However, many patients report continued physical disability and low back and leg pain after surgery. An interdisciplinary team of surgeons and a British-trained osteopath in South Korea published a prospective randomized controlled pilot trial to determine the feasibility and potential benefit of using osteopathic manipulative therapy (OMT; manipulative care provided by foreign-trained osteopaths) as an integral component of a postdiskectomy rehabilitation program.

Inclusion criteria were patients aged 20 to 65 years who underwent lumbar microdiscectomy to manage low back pain and who experienced leg pain resulting from a herniated disk. The exclusion criteria were revision or combined surgery, pregnancy, metastatic disease, or mental disorder.
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. Posturgical 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 intervention after knee and hip arthroplasty has been shown to be a feasible approach for improving postsurgical care.3,4 This study further supports its utility as an adjunct therapy and a potential standardized protocol for postsurgical rehabilitation.

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