Osteopathic Manipulative Therapy Efficacious for Patients With Chronic Migraines


In 2011, The Somatic Connection reported on a German clinical trial using osteopathic manipulative therapy (OMTh; manipulative care provided by foreign-trained osteopaths) for patients with migraines.1 At the time the study was published, researchers recommended several possible next steps, including adding a sham intervention group and increasing the cohort size. This year, foreign-trained osteopaths who graduated from the Accademia Italiana Osteopatia Tradizionale in Pescara, Italy, in collaboration with local hospitals in Italy, reported on the largest randomized controlled trial of OMTh or sham therapy to treat patients with chronic migraines.

In the reviewed study, 105 participants who had never undergone OMTh (36 men, 69 women, aged 18 to 60 years) were blindly sorted into 3 groups: (1) OMTh group: OMTh and medication (mean [SD] age; 36.9 [9.3] years); (2) sham group: sham therapy and medication (40.7 [8.7] years); and (3) control group: medication alone (38.4 [9.9] years). During a 6-month period, participants received either 8 OMTh or sham therapy sessions, depending on their group. The OMTh group received myofascial release, balanced ligamentous tension or balanced membranous tension, and craniosacral therapy based on findings from osteopathic assessments. Sham therapy consisted of osteopathic examination and light manual contact. The primary outcome was measured by the Headache Impact Test, which is used to rate the impact of headaches on a participant’s daytime activities, taken at baseline and at 24 weeks.

Results showed a statistically significant reduction in Headache Impact Test scores between the OMTh group compared with both the control (−8.40, −11.94, −4.86; *P*<.001) and sham therapy (−4.83, −8.36, −1.29; *P*<.001) groups. The sham therapy group did not demonstrate a statistically significant difference vs control. In addition, OMTh was effective compared with the sham therapy and control groups using several secondary outcome measures. No adverse effects were reported. The researchers provided both the OMTh and sham therapy interventions; however, participants who received the sham therapy were blinded to group allocation.

Osteopathic manipulative therapy is effective at reducing symptoms and recurrence of migraines, in addition to reducing the amount of medication needed for patients to control symptoms. The researchers concluded that adjunct OMTh notably improved the quality of life of patients with migraines. This is the largest, most rigorous study completed to our knowledge and is important because the authors were able to replicate results of past studies. This study not only provides evidence on its own, but it also lends further credibility to the earlier work. (doi:10.7556/jaoa.2015.127)

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Reference

Ultrasound Measurement of Vertebral Artery Blood Flow Before and After High-Velocity, Low-Amplitude Thrust Therapy


Relevant to concerns about the safety of cervical spine manipulation, physical therapy researchers conducted a single-blind randomized controlled trial
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; Ehlers-Danlos syndrome; or if the atlantoaxial section of the vertebral artery could not be visualized on ultrasound.

The outcome measures were assessed with color flow Doppler ultrasound. The measures were hemodynamic markers of peak systolic velocity and end diastolic velocity (EDV). Secondary measures were mean velocity and a resistance index. The ultrasound transducer was held in place over the C1-C2 area throughout the procedure on all participants at 60° or less to ensure accurate measures.

The manipulation for the intervention group was to the atlantoaxial joint. The operator placed a finger over the posterior-superior aspect of the transverse process of C1 and thrusted in an anterior-inferior-medial direction to the left and then returned the head to neutral. In the control group, the same setup was followed except that no thrust was applied and with the starting position held momentarily and then the head was repositioned to neutral. This description of the intervention is similar to high-velocity, low-amplitude procedures.

The continuously measured hemodynamic markers showed no statistical difference within or between the intervention and control groups on all the measures (ie, peak systolic velocity, EDV, mean velocity, and resistance index) (P<.01). Two markers, EDV and resistance index, at the prethrust point were statistically significant (P<.05). However, this finding was not hemodynamically notable because the change was less than 25%, the cutoff for clinical relevancy.

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.

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Osteopathic Manipulative Therapy Shows Promise for Improving Postdiskectomy Recovery


Lumbar diskectomy 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.1,2 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 microdisectomy 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.