tive long-term outcomes, whereas patients who received some type of conservative treatment had symptom improvement. Moreover, patients with CTS who had a longer duration of symptoms, positive Phalen test result, and thenar muscle wasting had poor outcomes with conservative interventions.

However, results from the studies examined could not be synthesized because of differences in CTS diagnostic criteria, patient population, type of conservative treatments evaluated, and outcome measures. Also, all of the appraised studies demonstrated a moderate or high risk of bias. Long-term follow-up was also lacking. Although OMT has been shown to have potential short-term benefits for patients with CTS,1 long-term, randomized clinical trials are needed. (doi:10.7556/jaoa.2017.009)

Melissa Yunting Tang, BS
Michael A. Seffinger, DO
Western University of Health Sciences, College of Osteopathic Medicine of the Pacific, Pomona, California

Reference

Spinal Manipulation and Mobilization Therapy for Cervicogenic Headache


Osteopathic physicians often use osteopathic manipulative treatment (OMT) to alleviate headaches caused by cervical somatic dysfunction in patients.1 Spinal manipulation, involving high-velocity, low-amplitude (HVLA) maneuvers, and cervical spine mobilization are additional manual therapies used by manual practitioners to manage cervicogenic headache (CEH), but the efficacy of these management techniques is disputed. Researchers performed a systematic review of randomized controlled trials (RCTs) to examine the benefits of manual therapy on the cervical spine in managing CEH.

The authors identified 10 studies that met the following inclusion criteria: (1) the study was an RCT that contained at least 1 intervention group that received spinal manipulation or mobilization and 1 control group that received another physical therapy intervention, (2) all participants had a diagnosis of CEH, and (3) headache pain and frequency were outcome measures. Studies were excluded if they were case reports, were not published in English or in a peer-reviewed journal, or involved patients with a headache diagnosis other than CEH.

Seven of the 10 studies compared the effects of spinal manipulation or mobilization with an alternate intervention or a placebo on patients with CEH, and 6 of the 7 studies found that manipulation or mobilization interventions showed statistically significant improvements of symptoms in patients with CEH when compared with the control interventions. Moreover, the evidence also suggests that increasing the frequency of spinal manipulation or mobilization may increase its therapeutic benefit. Combining exercise with spinal manipulation or mobilization was found to be more effective in reducing the symptoms of CEH than either modality alone. Only 1 study compared mobilization with manipulation. The authors found that mobilization (HVLA) was more effective than mobilization plus exercise in decreasing CEH duration, frequency, and associated disability and in increasing patient-perceived improvement (P<.001).

The authors concluded that cervical spine manipulation and mobilization are more beneficial than traditional physical therapy modalities and placebo interventions in lessening the intensity and frequency of symptoms in patients with CEH. However, it is difficult to draw general conclusions because the studies varied in terms of the SMT
techniques used, the intervention or placebo used in control groups, the diagnostic criteria for CEH, and primary outcome measures. Because OMT can include HVLA manipulation and mobilization procedures, a rigorous RCT is essential to assess the effectiveness of OMT in treating patients with CEH. (doi:10.7556/jaoa.2017.010)

Michael A. Seffinger, DO
Melissa Yunting Tang, BS
Western University of Health Sciences, College of Osteopathic Medicine of the Pacific, Pomona, California

Reference

Manual Craniosacral Therapy May Reduce Symptoms of Migraine Headache


Physical therapy researchers in Iceland studied the effect of craniosacral therapy (CST) on participants with migraine headache. Participants aged 18 to 50 years were recruited if they had a diagnosis of migraine and reported that they had had 2 or more migraine headaches in the month preceding the study. Participants were allowed to continue their usual activities of daily life and any medications they were taking but were not allowed to have any other form of alternative treatment.

The outcome measure was the Short-Form Headache Impact Test (HIT-6), which covers quality of life aspects such as “pain, social participation, general activity, vitality, intellectual activity and biological suffering.” The HIT-6 has been standardized and validated with 4 levels of influence on the life of the participant: little or no influence, some influence, considerable influence, and highest influence (“very seriously affect life of the individual”).

The 20 participants (18 women, 2 men) were randomly assigned to 1 of 2 groups, A or B. The HIT-6 was filled out 4 times every 4 weeks: first, at baseline; second, after group A received CST and group B waited; third, after group B received CST and group A waited; and fourth, 4 weeks later.

Craniosacral therapy was applied by 1 of 4 therapists who were trained in CST, which is a technique similar to cranial osteopathic manipulative medicine. In this study, the therapists followed the sequence of the so-called 10-step CST, which are diaphragm, cranial bone, and facial bone “releases.”

Results showed significant lowering of HIT-6 scores immediately after CST and then at 4 weeks after receipt of CST ($P=.004$). The study was limited by the small number of participants, the potential skill level differences between providers of CST, and the lack of a control group. This study was selected for review because it was a well-designed pilot, it adds to the evidence base for application of manual medicine in head pain, and it confirms my own experience in applying cranial osteopathic manipulative medicine to patients with migraine headache. (doi:10.7556/jaoa.2017.011)

Hollis H. King, DO, PhD
University of California, San Diego School of Medicine

Manual Therapy Lowers Psychological Aggravations in Patients With Tension-Type Headache


Research by this physiotherapist team in Spain on tension-type headache (TTH) showing the benefit