A Role for Acupuncture in Headache Management?

Acupuncture is widely used in the management of headaches and can be applied as a single modality or as part of a comprehensive treatment program. However, despite its frequent use in industrialized countries, considerable debate still exists as to whether acupuncture results in verifiable improvements above and beyond the placebo response.

This review of randomized controlled trials evaluated the effectiveness of acupuncture for headaches by examining results from 22 studies.

Included in the review were studies comparing acupuncture with any type of control intervention for the treatment of recurrent headaches. Specifically, the authors endeavored to assess whether evidence suggests that acupuncture is a) more effective than no treatment; b) more effective than "sham" acupuncture; or c) as effective as other headache interventions.

The 22 trials (15 involving migraines, six with tension headaches, and one with various headaches) included 1,042 patients. Fourteen of the trials compared true vs. sham acupuncture, with two showing no effects over sham acupuncture, three showing trends in favor of acupuncture, and six showing a significant benefit of true vs. sham acupuncture. The remaining eight trials compared acupuncture with other treatment forms and revealed contradictory results.

Conclusions: Overall, the existing evidence suggests that there is a role for acupuncture in the management of recurrent or chronic headaches. However, the existing literature does not seem adequate to validate the efficacy of acupuncture vs. no treatment or vs. other headache treatments. The authors suggest that large-scale studies are needed to evaluate the effectiveness of acupuncture "under real-life conditions."

Melchart D, Linde K, Fischer P, et al. Acupuncture for recurrent headaches: a systematic review of randomized controlled trials. *Cephalalgia* 1999:19, pp779-86.

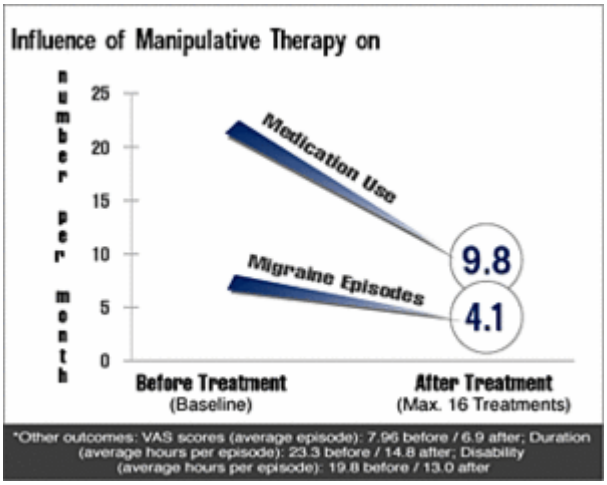
Chiropractic Management of Migraines

According to the International Headache Society (IHS), diagnostic criteria for migraine with aura requires at least three of the following: one or more fully reversible aura symptoms indicating focal cerebral cortex dysfunction, brainstem dysfunction, or both; at least one aura symptom developing gradually over four or more minutes, or two symptoms occurring in succession; no aura symptoms lasting for more than 60 minutes; and headache after aura, with a free interval of less than 60 minutes.

The cervical spine has been reported to be involved in headache, dizziness and referred pain, with several studies demonstrating significant improvements after chiropractic manipulation. In the current study, half of 127 subjects classified with migraine by the IHS criteria (at least one migraine per month) underwent diversified chiropractic adjustment at chiropractic vertebral subluxations determined by the practitioner providing the manipulation.

The other half of the subjects were designated as a control group and received interferential therapy, in which electrodes were placed on each subject but no current was delivered. The study consisted of three stages: two months of data collection before treatment; two months of treatment (maximum of 16 treatments per subject); and two months of data collection after treatment.

Subjects completed headache diaries during the six-month period noting frequency, intensity, duration, disability, associated symptoms, and use of medication for each migraine episode. Subjects in the manipulation group demonstrated statistically significant improvement in migraine frequency, headache duration, disability and medication use. Twenty-two percent of the study participants reported more than a 90% reduction in migraines after two months of SMT, with approximately 50% more participants reporting significant improvement in severity of migraine episodes.



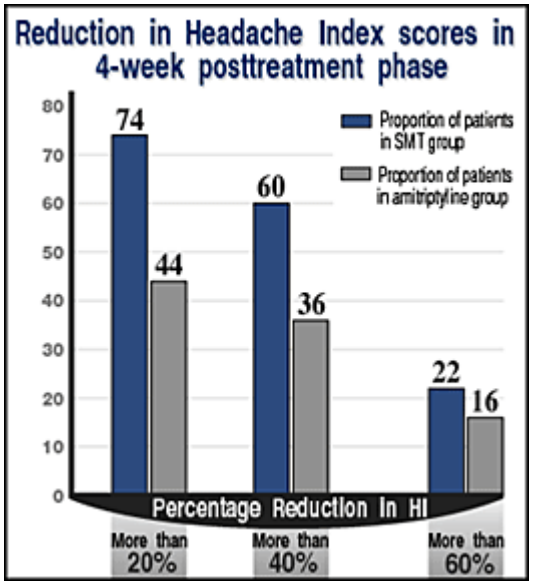
These results appear to support previous evidence suggesting significant improvements in specific subjects following chiropractic manipulation. The authors note that since "a high percentage (83%) of participants in this study reported stress as a major factor for their migraines... it appears probable that chiropractic care has an effect on the physical conditions related to stress and that in these people the effects of the migraine are reduced."

Tuchin PJ, Pollard H, Bonello R. A randomized controlled trial of chiropractic

spinal manipulative therapy for migraine. *Journal of Manipulative and Physiological Therapeutics*, Feb. 2000:23(2), pp91-5.

Chiropractic Manipulation and Migraine Headaches:

An estimated 11 million adults in the United States suffer moderate to severe disability from migraine headaches. Chiropractic spinal manipulation is a common alternative therapy, but its efficacy compared to standard medical treatment has not been determined.



This randomized clinical trial involved 218 patients diagnosed with migraine. It measured the relative efficacy of spinal manipulation, amitriptyline, and therapy combining both of these treatment modalities for prophylaxis of migraine headache. Clinically important improvement was observed in patients receiving spinal manipulation alone (40%), amitriptyline alone (49%) and combined therapy (41%). But in the posttreatment follow-up period, a far higher percentage of patients who received only spinal manipulation experienced reduction of their headache index scores compared with those taking amitriptyline or who underwent the combined-therapy.

This study showed chiropractic spinal manipulation for migraine headaches to be as effective as an established medical treatment modality (the drug amitriptyline); the results suggest that chiropractic therapy should be considered a viable treatment option for migraine headache sufferers.

Nelson CF, Bronfort G, Evans R, et al. The efficacy of spinal manipulation, amitriptyline and the combination of both therapies for prophylaxis of migraine headache. *Journal of*

Manipulative and Physiological Therapeutics, Oct. 1998;21(8), pp511-19.

Migraines Relieved by Spinal Manipulation

Participants in a migraine research trial were reviewed for symptoms and clinical features and their response to manual therapy. The four selected cases of migraine responded dramatically to spinal manipulation therapy (SMT), with numerous self-reported symptoms either eliminated or substantially reduced.

Average frequency of episodes was reduced on average by 90%, duration of each episode by 38%, and use of medication by 94%. In addition, several associated symptoms were substantially reduced, including nausea, vomiting, photophobia and phonophobia. Each of the four cases is presented to assist practitioners in making a more informed prognosis.

Tuchin PJ. A case series of migraine changes following a manipulative therapy trial. *Australasian Chiropractic & Osteopathy*, Nov. 1997;6(3), pp85-91.

Acupuncture May Help Migraine Sufferers

Twenty-six patients (aged 21 to 65) suffering from chronic migraines underwent acupuncture to evaluate the long-term stability of treatment effects. Patients documented frequency, duration and intensity of migraine attacks, as well as analgesic intake for five-week periods before treatment, immediately after treatment and three years later.

With a definition of benefit as symptom reduction greater than 50%, improvement was shown in 14 patients (53.8%) at posttreatment, and in 13 patients (50%) at follow-up.

The number of analgesics taken (average per patient) for relief of migraine headache during the five-week periods was reduced from 19.5 at pretreatment to 9.4 at post-treatment and 9.2 at follow-up. Comparisons of frequency, duration and intensity of attacks showed a significant reduction in frequency as the primary reason for symptom improvement. Duration and intensity of attacks did not change significantly at posttreatment or follow-up.

Results demonstrate the potential benefit of acupuncture treatment for long-time migraine patients, and may contradict the presumption that patients can only achieve short-lived improvements in migraine symptoms from acupuncture.

Baischer W. Acupuncture in migraine: long-term outcome and predicting factors. Headache, 1995;(35), pp472-74.

JAMA. 2000 Nov 22-29;284(20):2640-1.
Toward evidence-based management of migraine.
Matchar DB, McCrory DC, Gray RN.

This influential study conducted at Duke University assessed evidence from a large number of randomized controlled trials for the effectiveness of spinal manipulation and other treatments for tension-type and cervicogenic headaches. Spinal manipulation reduced headache frequency by 69% and severity by 36%. Spinal manipulation also showed better results than did the commonly prescribed amitriptyline. The study showed that 82% of amitriptyline patients reported adverse effects from the drug, while only 4% of spinal manipulation patients reported adverse effects.