

Headaches/Migraine

Vectored upper cervical manipulation for chronic sleep bruxism, headache and cervical spine pain in a child. Knutson, G.J *Manipulative Physiol Ther* Vol 26 No. 6 July/August 2003.

This is the case of a six-year-old who had chronic sleep bruxism (causing abnormal tooth wear), morning headaches and cervical spine (neck) pain.

Adjustments to the upper cervical spine using the atlas transverse process as the contact point. There was complete relief of her chronic symptoms along with elimination of abnormal joint and structural problems.

Occipital headaches stemming from the lateral atlanto-axial (C1-2) joint. Aprill C, Axinn MJ, Bogduk N. *Cephalalgia* 2002 Feb;22(1):15-22

The lateral atlanto-axial joints (C1-2) are capable of causing pain in the occiput, but few clinical studies have validated this source of occipital headache. Patients presenting with occipital pain underwent diagnostic blocks of their lateral atlanto-axial joints if they demonstrated clinical features presumptively suggestive of a C1-2 origin for their pain. Of 34 patients investigated, 21 obtained complete relief of their headache following diagnostic blocks, indicating that a C1-2 source of occipital pain is not rare. [21/34 = 62%]. The clinical features used to select patients for blocks, however, had a positive predictive value of only 60%.

A randomized controlled trial of chiropractic spinal manipulative therapy for migraine. Tuchin PJ, Pollard H, Bonello R. *Journal of Manipulative and Physiological Therapeutics* Feb. 2000;23(2), PP.91-5.

This was a six month study of 127 migraine sufferers half of whom had diversified chiropractic adjustments. The other half was the control group. Subjects in the manipulation group demonstrated statistically significant improvement in migraine frequency, headache duration, disability and medication use. 22% of those undergoing chiropractic care reported more than 90% reduction in migraines after two months. About 50% reported significant improvement in severity of migraine episodes.

Evidence report: behavioral and physical treatments for tension type and cervicogenic headache. McCrocy D and Gray R Duke University. 2001.

This report from Duke University compares the effectiveness of drug and other therapies for the most common type of headache the cervicogenic headache. The report stated that chiropractic is more effective for headache (both in frequency and severity) than other soft tissue therapies and that chiropractic is superior to drug therapy, providing markedly superior long-term results.

Encephalgia/Migraine. Bofshever, H. *International Chiropractic Pediatric Newsletter* Jan/Feb 2000

A ten year-old girl with chronic, severe migraine (6 times a week for the past 3 years) was unable to go to school due to the severity of her condition. She was treated at a Children's Hospital by a neurologist.

Chiropractic examination revealed VSC at C1/C2. The patient's headaches improved following her 3rd adjustment (one week) at which time she stopped using Periactin^a Syrup (prescribed by her pediatrician). By the third week she was back in school and started dance classes for the first time in 2 years, and actually began to smile again. She was leading a normal and healthy life for a child her age by the end of the 5th visit.

The anatomic basis for the effectiveness of chiropractic spinal manipulation in treating headache. Hack, GD Abstracts from the 15th annual upper cervical spine conference Nov. 21-22, 1998. *CRJ*, Vol. VI, No. 1, Spring 1999.

This paper is by the same doctor who led the team that discovered a musculo-ligamentous relationship between the cervical spine (neck) and the dura mater (covering of the brain stem). The author writes:

An increasing body of literature relates headaches to pathology affecting the cervical spine and a number of clinical trials have demonstrated that chiropractic spinal manipulation directed at the neck is valuable for managing headache.

Mobilization of the Spine. Grieve GP (1984) Churchill Livingstone, London/New York, 4th edition, 22-23.

All those experienced in manipulation can report numerous examples of migrainous headaches, disequilibrium (vertigo), subjective visual disturbances, feelings of retro-orbital pressure, dysphagia, dysphonia, heaviness of a limb, extra segmental paraesthesia. Restriction of respiratory excursion, abdominal nausea and the cold sciatic leg being relieved by manual or mechanical treatment of the vertebral column.

Unconventional medicine in the United States, Eisenberg, DM et al., *NEJM* 28 May 1993. Pp.246-252.

Twenty-seven percent of Americans who visit alternative health care providers do so for headache relief.

The efficacy of spinal manipulation, amitriptyline and the combination of both therapies for prophylaxis of migraine headache. Nelson CF, Bronfort G, Evans R, et al. *Journal of Manipulative and Physiological Therapeutics*, October 1998: Vol. 21, No. 8, pp 511-19.

This study compared the relative effectiveness of treating migraines with chiropractic care, the anti-depressant/anti-anxiety drug amitriptyline (brand name Elavil); and with a combination of both the drug therapy and chiropractic care.

Patients who received only chiropractic showed significant improvement, on a par with those given the powerful prescription drug (though without the side effects). The headache index, from a diary kept by each patient, showed chiropractic to have reduced

the severity and frequency of headaches as well or better than the combined therapy or amitriptyline alone at each stage of the study.

Spectrum of pathophysiological disorders in cervicogenic headache and its therapeutic indications. Martelletti P, LaTour D, Giacobazzo M *Journal of the Neuromusculoskeletal System* 1995; 3:182-7.

Patients were diagnosed with cervicogenic headache (headache arising from neck structures) and received chiropractic care. The patients reported improvement.

Chiropractic care of a 13-year-old with headache and neck pain: a case report.

Hewitt, EG, Portland, Oregon. *Proceedings of the National Conference on Chiropractic and Pediatrics*. Oct, 1993 Palm Springs, CA. Pub. International Chiropractors Assoc., Arlington, VA.

This report describes a 13 year old female who had suffered from severe headaches and neck pain for five days. Following a series of four chiropractic treatments over a two week period, her headache and neck pain resolved.

Incidence of ponticulus posterior of the atlas in migraine and cervicogenic headache.

Wight S, Osborne N, Breen AC. *Journal of Manipulative and Physiological Therapeutics*, Jan. 1999; vol. 22, no. 1, pp15-20.

There is a common structural variation of the atlas vertebra called ponticulus posticus (also known as foramen arcuale or "Kimmerle's anomaly"). Investigators studied the relationship between this condition and headache symptoms in 895 first-time chiropractic patients. The patients had migraine with aura (classical migraine), migraine without aura (common migraine), cervicogenic headache, neck pain only, and other problems. The authors found a significant correlation of ponticulus posticus with migraine without aura. They explain that because the ponticulus posticus is intimately attached to the atlanto-occipital membrane (where the spine and skull meet) and this membrane, in turn, is attached to the dura (the outermost covering of the brain and spinal cord), small tension exerted on the dura may result in excruciating head pain of a type experienced in migraine.

A case series of migraine changes following a manipulative therapy trial. Tuchin PJ. *Australasian Chiropractic & Osteopathy*, Nov. 1997; 66(3), pp. 85-91.

This report discusses four cases of migraine that responded dramatically to chiropractic adjustments. Many self reported symptoms were either eliminated or substantially reduced.

Average frequency of episodes was reduced by 90% with the length of each headache reduced by 38%. Medication use dropped 94%. Other symptoms associated with migraine were reduced including nausea, vomiting, photophobia and phonophobia.

Evaluation of the Toftness system of chiropractic adjusting for subjects with chronic back pain, chronic tension headaches, or primary dysmenorrhea. Snyder, BJ, Sanders, GE *Chiropractic Technique*, 1996;8:3-9.

This is the study of 24 subjects with chronic back pain, 19 subjects with chronic tension headaches and 26 subjects with dysmenorrhea who underwent a series of Toftness adjustments or sham interventions. Toftness adjustments had significant clinical benefit, whereas those receiving sham interventions did not improve.

Chronic pediatric migraine-type headaches treated by long-term Inderol prior to chiropractic care, a case report. Haney, VL, Colorado Springs, CO. *Proceedings of the National Conference on Chiropractic and Pediatrics*. Oct, 1993 Palm Springs, CA. Pub. International Chiropractors Assoc., Arlington, VA.

An 11-year-old pediatric female had an eight year history of severe migraine-type headaches, and a four year history of 20 mg. intake of Inderol daily. The headaches were still incapacitating the child approximately two times per week, despite medication. The child had been a hit and run victim at 18 months, with her first known headache occurring at about the age of three.

Cervical and thoraco-lumbo-pelvic x-rays revealed cervical hypolordosis, C1/C2 hyperextension subluxation and pelvic unleveling. Correction was accomplished using diversified style adjustment. The patient's initial complaint of severe headaches resolved.

Follow-up x-rays show that there has been a decrease in thoracic and lumbar curvatures. She has slowly been weaned from Inderol, and is off all pain medications as well.

The effect of spinal manipulation in the treatment of cervicogenic headache. Nilsson N, Christensen HW, Hartvigsen J. *Journal of Manipulative and Physiological Therapeutics*, 1997; 20:326-330.

This is a randomized controlled trial performed at the University of Odense, Denmark by chiropractors and medical doctors.

Of 53 patients suffering from frequent headaches, 28 received high-velocity, low-amplitude cervical manipulation twice a week for three weeks. The remaining 25 received low-level laser in the upper cervical region and deep friction massage in the lower cervical/upper thoracic region, also twice a week for three weeks.

The use of analgesics decreased by 36% in the manipulation group, but was unchanged in the soft-tissue group; this difference was statistically significant. The number of headache hours per day decreased by 69% in the manipulation group compared with 37% in the soft-tissue group; this was significant. Finally, the headache intensity per episode decreased by 36% in the manipulation group, compared with 17% in the soft-tissue group; this was significant.

Spinal manipulation vs. Amitriptyline for the treatment of chronic tension-type headaches: a randomized clinical trial. Boline PD, Kasaak K, Bronfort G, Nelson C, Anderson AV, *Journal of Manipulative and Physiological Therapeutics* 1995; 18: 148-154.

Six weeks of drug therapy were compared to six weeks of chiropractic adjustments. The drug therapy was considered slightly more effective than chiropractic however 82% of the patients had side effects which included drowsiness, weight gain and dry mouth. Cardiac problems and glaucoma were also associated with amitriptyline use.

Chiropractic patients had no side effects apart from slight neck stiffness in the first two weeks of the study that 5% of the patients reported. After four weeks, chiropractic and drug therapy was halted in both groups. The patients who used drugs began having headaches again while the chiropractic group continued to express headache relief, as well as higher levels of energy and vitality than the drug therapy group.

A controlled trial of manipulation for migraine. *Aust and New Zealand Journal of Medicine* 1978;8:589-593. Parker GB, Tupling H, Pryor D.

Spinal manipulation administered by chiropractors, spinal manipulation administered by medical practitioners and physical therapists and a mobilization procedure administered by physical therapists were studied.

Eighty-five patients received two manipulations per week over a 2-month period. At the end of the study, all three groups showed clinically significant improvement in the frequency, intensity, and duration of migraine headache episodes.

Functional disorders (fixations) of the spine in children. Lewit K. *Manuelle Therapie*, J.A. Barth, Leipzig, 1973. Chap.2.7. Pp.50-54.

In a total of 57 children's migraine cases, 48 had excellent results from manipulative therapy. Functional disorders in children may manifest themselves as sleep disorders, loss of appetite, psychic problems or dysmenorrhea and may not exist as spinal pain. Studies on healthy children revealed pelvic subluxations in 40% of all school children, cervical fixation in 15.8%. After manipulative treatments, the problems rarely recurred.

The effect of manipulation (toggle recoil technique) for headaches with upper cervical joint dysfunction: a pilot study. Whittingham, W, Ellis WB, and Molyneux TP, *J Manipulative Physiol Ther*, July/August 1994, 17(6): 369-375.

Twenty-six patients (16 males, 10 females) had chronic headaches with upper cervical joint dysfunction. Significant reduction in the severity and frequency of headaches was reported in a large majority of the subjects (24 out of 26).

Chiropractic care of a 13 year-old with headache and neck pain: a case report.

Hewitt EG. *Journal of the Canadian Chiropractic Association*, Sept. 1994; 38(3): 160-162.

Patient had injured her neck in gymnastics. A 13 year-old female suffered from unremitting headache and neck pain for five days. She described them as a throbbing and stabbing pressure that normally occurred once per week and lasted approximately one hour. She had missed one week of school. Her family MD had recommended seeing a chiropractor.

After four chiropractic treatments over a two-week period, her headache and neck pain resolved. At a four-week follow-up, she remained pain free.

Chiropractic care of children with headaches: five case reports. Anderson-Peacock, ED, *Journal of Clinical Chiropractic Pediatrics*, 1996 1(1) 1996:18-27.

Five children presented with varying types of headaches to a family-based chiropractic practice. In each case, spinal subluxations were present. Following reduction of those subluxations through chiropractic adjustments the child's chief complaint remised. Adjunctive therapy (education on diet, posture and exercise) was not given until the headaches stopped. Thus, it was felt that the headache reduction may have been due to the restoration of nervous system function through the chiropractic adjustment.

Chiropractic treatment of childhood migraine headache: a case study. Proceedings of the National Conference on Chiropractic and Pediatrics 1994, p. 85-90. As abstracted by Masarsky Cs. Headache and Torticollis (Research review) *ICA International Review of chiropractic* 1995; 51(1): 45-47.

This is the case of a 10-year-old male with a three-year-history of migraine headaches. During the first month of chiropractic care, it was reported that he only had two prodromal episodes, but no full migraines.

13-year-old with headache, depression, poor appetite, nausea, general muscular weakness, dizziness and sensitivity to light and noise. Case reports in chiropractic pediatrics. Esch, S. *ACA J of Chiropractic* December 1988.

This is the case of a 13-day-old with a history of respiratory difficulty since birth (home birth, uncomplicated). The infant had difficulty nursing due to "stiffness."

Upon presentation patient was in considerable pain, wearing dark glasses and ear plugs to compensate for increased sensitivity to sound and light. One week beforehand he had been injured in a football game collision. Medical doctors had given the child painkillers. Patient was hospitalized in traction for two weeks with no improvement.

Chiropractic examination: X-ray (Davis series) of the cervical spine showed right lateral displacement of atlas with right rotation of C-2.

Following initial adjustment the patient could ride home without wearing his sunglasses and for the first time in two weeks expressed an interest in food. He returned the next day saying he felt, "The best I've felt in six weeks."

A holistic approach to severe headache symptoms in a patient unresponsive to regional manual therapy. Stude, DE and Sweere, JJ. *Journal of Manipulative and Physiological Therapeutics* 1996; 19:202-7.

This case history deals with a woman who suffered from severe migraine headache symptoms who found no relief from medical care or cervical chiropractic adjustments. The patient, suffering from severe headache complaints previously unresponsive to regional cervical spine care, had chiropractic spinal adjustments. After care the patient

reported no visits to the emergency room, even after a 1-year follow-up, and the average visual analogue pain decreased.

Chiropractic treatment of chronic episodic tension type headache in male subjects: a case series analysis. Mootz RD, Dhami MSI, Hess JA, et al. *Journal of the Canadian Chiropractic Association*, 1994; 38(3): 152-159.

Ten male outpatients 18-40 years old with a history of chronic headache of at least six months in duration occurring at least once a week were seen in the Palmer College of Chiropractic-West Outpatient clinic.

Diversified technique was the primary care. Results showed an over 50% decrease in headache frequency and duration. Mean anchored pain scale intensity ratings changed.

Headache following whiplash. Kreeft, J. In Spine: State of the art reviews: Cervical Flexion-Extension/Whiplash Injuries, Sept. 1993, p. 395.

A relationship was noted between whiplash injury and headache.

Trauma of the cervical spine as cause of chronic headache. Braaf M. & Rosner SJ. *Trauma*, 1975, 15:441-446.

A relationship was found between the cervical spine and chronic headache.

Results of manipulative treatment on childhood migraine. *Hippocrates*, 1963, pp. 308-316.

Children with migraine responded well to manipulation.

Chiropractic management of migraine without aura: a case study. Lenhart, L.J. *JNMS* 1995; 3(10): 20-26.

A case of migraine is discussed. The author performed a number of tests to objectify his care. The patient continued his improvement two months post-spinal (cervical) adjustments.

Mobilization of the cervical spine in chronic headaches. Turk Z. & Ratkolb O. *Manuel Medizin*, 1987:15-17.

Spinal manipulation was seen as a successful treatment for headache.

Spinal curvatures-visceral disturbances in relation thereto. Ussher NT. *California and Western Medical Journal*, 1933, 38:423.

Ussher has written that spinal abnormalities could be causing visceral disorders and that X-rays could be a help in diagnosing the spine/internal organ relationship. Ussher urged a careful neurological examination of the spine as part of differential diagnosis.

Spinal manipulation and headaches of cervical origin. Vernon HT. *J Manipulative Physiol Ther*, 1989, 12:455-468.

The mechanism of cervical headache was discussed.

Diagnosis and treatment of TMJ, head, neck and asthmatic symptoms in children.

Gillespie BR, Barnes JF, *J of Craniomandibular Practice*, Oct. 1990, Vol 8, No. 4.

From the abstract:

Pathologic strain patterns in the soft tissues can be a primary cause of headaches, neck aches, throat infections, ear infections, sinus congestion, and asthma.

Manipulative therapy in the chiropractic treatment of headaches: a retrospective and prospective study. Vernon H. *J Manipulative Physiol Ther*, 1982; 5:109-112.

Discusses the mechanism of headache and the health of the cervical spine.

Occipital headaches; statistical results in the treatment of vertebragenous headache. Droz JM, Crot F. *Swiss Annals VIII*, 1985; 127-36.

332 patients received an average of 8.6 chiropractic adjustments. 80% of patients had excellent (pain-free) and good (almost pain-free) outcomes with 10 reporting a 75% decrease in pain.

Chiropractic adjustment in the management of visceral conditions: a critical appraisal. Jamison JR, McEwen AP, Thomas SJ. *J Manipulative Physiol Ther*, 1992; 15:171-180.

This was a survey of chiropractors in Australia. More than 50% of the chiropractors stated that asthma responds to chiropractic adjustments; more than 25% felt that chiropractic adjustments could benefit patients with dysmenorrhea, indigestion, constipation, migraine and sinusitis.

Chiropractic treatment of chronic episodic tension type headache in male subjects: a case series analysis. Mootz, RD, Dhama MSI, Hess JA, et al. *Journal of the Canadian Chiropractic Association*, September 1994; 38(3): 152-159.

Eleven men between the ages of 18 and 40 who suffer from headache received chiropractic care. The patients reported consistent and significant reduction in the frequency and duration of headaches. However, the intensity of the headaches in this group was unchanged. The adjustments used were diversified and included myofascial trigger point therapy and moist hot packs. Would another adjusting technique have been more effective? Less effective? Unfortunately that research was not done.

Toftness Spinal Correction in the treatment of migraine: a case study. Gemmell HA, Jacobson BH and Sutton L *Chiropractic Technique*, May 1994; 6(2): 57-60.

Chiropractic success using the light force Toftness technique.

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