Dynamic Chiropractic

HEADACHES & MIGRAINES

A Whole-Body Approach to Chronic Tension Headaches

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Nearly every day in our practices, we see patients with chronic headaches that have not responded to traditional treatment. They present in our offices with a feeble hope that "maybe" a chiropractor can help. We know if we were given the opportunity earlier in the development of the condition, we could potentially optimize or restore normal relationships of the spine and extremities.

Curiously, while taking a history with these patients, we often discover untreated traumas related to auto accidents dating two to five years prior to seeking our care. One would expect the attendant neck and headache pain following whiplash, but symptoms including dizziness, arm weakness and low back pain often result in the patient being labeled a malingerer.

As early as the 1980s, Mcnab's research showed, in his review of 266 medicolegal cases, that 45 percent of the people continued to have symptoms two years after legal settlements were reached.[1] This justifies a genuine concern for and belief in our patients and their complaints.

We know chiropractic care is valuable and necessary in these cases, but how can we prove that it is effective? Recent articles published in November 2015 and February 2016, utilizing randomized clinical trials, state, "Chiropractic care may reduce frequency of headaches in patients with chronic tension-type and cervicogenic headache.[2] And the conclusion of another research project from 2012 states, "The combination of acupuncture with chiropractic spinal manipulative therapy was a reasonable alternative in treating this patient's chronic tension-type headaches superimposed with migraine."[3,9]

Where to Start

A whole-body approach is quite appropriate when a cadre of symptoms is highlighted by chronic tension headaches and related to obvious trauma. Where does one start? When patients turn to chiropractic care for pain relief, few, if any, expect an area of their anatomy distant from the perceived pain to be at fault. However, in seven of 10 patients with back pain, postural fatigue and spinal strain cause their discomfort.[4]

We find that the ultimate cause of pain may originate in any tissue or joint involved in the kinetic chain of the human structure. The stress can even be traced to altered foot biomechanics, which can lead to pelvic and spinal distortions.[5] This is the exact scenario that, with time, may produce the battery of chronic symptoms some patients present with.

This type of approach fits well with chiropractic training. It is interesting what Dr. D.M. Fraser, a medical doctor, heard at a meeting of the American Association of Orthopedic Medicine. He was instructed by an orthopedic physician "that it was mandatory to check the feet in all cases of car accident as the force comes up through the floor board of the vehicle and travels through the body to the neck." He also was admonished to evaluate the tarsal bones, which may be "subluxed" after

accidents, and to perform a "simple manipulation" to restore the foot to its normal integrity.[4]

This "medical" evaluation and treatment was directed at the entire biomechanical / kinetic chain, including consideration of the condition of the knees, pelvis, lumbar spine, shoulders and cervical spine. Unfortunately, many times we find our patients receive treatment from their medical providers which deviates substantially from this logical and global approach.

The Role of Cervical Spine Posture

Ideal cervical spine posture requires coordination of bone, soft tissue, and nerves to respond to and control forces of gravitational loading. Faulty foot mechanics, usually pronation, can affect all supporting joints above the foot and contribute to anterior translation of the cervical spine and head. When the body is erect and weight is evenly distributed between the feet, there are minimal demands for asymmetrical muscle tension.

The direct forces applied to the cervical spine during a whiplash accident can account for many of the soft-tissue injuries during the acute phase. However, the long-term effects of improper posture initiated elsewhere in the spine are more likely linked to the chronic headache. The cervical spine, unlike the rest of the axial skeleton, exhibits greater ranges of motion. Primarily, stability is maintained not by cervical musculature, but by the osseous and ligamentous structures. The muscles are responsible for the intricate movements and also can be recruited to act as splints following trauma to the cervical region.[4]

Consider the concept of muscular splinting in relation to new anatomical discoveries involving the cervical spine. A group of researchers, including dentists, at the University of Maryland announced their discovery of an attachment of tissue connecting the rectus capitis posterior minor muscle (RCPM) with the dura in the region of the atlanto-occipital junction. The same structure has since been identified on MRI and even among Macaca monkeys.

Since this discovery, additional muscle-dural attachments have been identified. These attachments are located between C1 and C2, and involve the rectus capitis posterior major and the obliqus capitis inferior muscles. One medical response to this revelation has been the development of a surgical procedure to sever the connection of the RCPM to relieve tension headache from dural irritation. Because these dural connections function to protect the cord from inward folding of the dura on the cord during extension, it seems more logical to simply relieve the irritation responsible for the muscle spasm.[5]

Treatment Protocol for Post-Traumatic Headache

The following is a reasonable treatment protocol for the post-traumatic tension headache patient, recommended when chiropractic care is indicated. Our analysis includes a pretreatment surface EMG evaluation of the paraspinal musculature. From this data, we can target areas of irritation which may be distant from the patient's reported pain. We also can correlate these irritations in the lumbar spine and pelvis with dysfunctions in the lower extremities.

An important part of care is the utilization of a custom-made, functional foot orthotic that support all three arches of the feet and allows for optimal flexible locomotion. Not only do foot orthotics support the arches of the feet and help hold adjustments of the tarsals, but they also reduce the transmission of shock into the spine.

Pathological shock occurs when normal walking on ridged surfaces exacerbates irritated structures. Force generated at heel strike can reach 5-7 times body weight, with the

musculoskeletal system itself absorbing a significant percentage of the total under normal conditions.[5]

Chiropractic adjustments are directed to reduce the subluxations, especially in the targeted spinal areas, with ancillary procedures and therapeutic exercises as necessary.

Chiropractic care, with its emphasis on comprehensive spinal health, is well-suited to the complex, diverse symptoms and therapeutic responses that have contributed to seeming confusion regarding traumatic whiplash-type injuries. Research indicates only about half of all whiplash patients can expect to achieve full recovery.[6-8]

A chiropractor's systematic approach to treatment, including rehabilitation and support of affected extremity and spinal structures, can achieve better than average results for many patients with traumatically induced chronic symptomatology.[8]

References

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