

## Chiropractors Managing Chronic Hypertension

### *AN IDEA WHOSE TIME HAS ARRIVED*

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From my perspective, appropriate management of chronic hypertension relies on three primary premises: 1) Nutritional, lifestyle, and manipulative interventions should be the treatments of choice for essentially all patients with chronic primary hypertension. 2) As the only nationally licensed health care discipline with training in nutritional, lifestyle and manipulative interventions, the chiropractic profession should play a premier national role in the management of chronic hypertension. 3) Pharmacosurgical interventions are important for medical causes and recalcitrant cases of hypertension. Since premises #2 and #3 are founded upon or associated with premise #1, I will provide some substantiation here for premise #1.<sup>1</sup>

As a diagnosis and clinical disorder affecting approximately 25 percent of American adults, hypertension is the single most common diagnosis in family medicine. By "chronic hypertension," I am referring to the 90 percent of all hypertension cases labeled as "primary," "essential" or "idiopathic" - i.e., those that lack any routine "medical" cause, such as hypercalcemia, hyperaldosteronism, aortic coarctation, renovascular disease, renal parenchymal disease, systemic sclerosis, drug iatrogenesis, hyperthyroidism or hypothyroidism.



Chronic hypertension accelerates the development of atherosclerosis and is thus a major risk factor for stroke and myocardial infarction. Additionally, the physiologic consequences of sustained high blood pressure contribute to the development of congestive heart failure, hypertensive retinopathy, and hypertensive kidney disease. Of course, combining chronic hypertension with other risk factors such as smoking, diabetes mellitus, and dyslipidemia causes an exponential increase in the risk for catastrophic cardiovascular morbidity and mortality.

Because management of hypertension is the single most effective means for reducing premature morbidity and mortality in developed nations, it ranks highly among the most important public health issues in America, Canada, Australia, Japan, England and most of Western Europe, while still being important in South America, the Middle East, and Asia. In other words, chronic hypertension is a worldwide health disorder of the highest clinical and public health importance.

The safest, most effective and most appropriate treatments for the vast majority of cases of chronic hypertension fall within chiropractic scope of practice: nutritional intervention and manipulative therapy. Many dietary and nutritional interventions are impressively well-documented in the research literature; because these interventions are also preferred by patients and are preferentially utilized clinically by many doctors, all three criteria for evidence-based medicine are satisfied (research substantiation, clinician utilization, and patient preference).

#### Nutritional Treatment

Most chiropractors are probably unaware that the most effective nutritional treatment for chronic hypertension has been researched and documented by Dr. Alan Goldhamer, a chiropractic doctor and graduate of Western States Chiropractic College (now University of Western States). Writing in the June 2001 issue of the *Journal of Manipulative and Physiological Therapeutics*, [Dr. Goldhamer and colleagues](#) showed that the combination of improved diet and fasting normalized blood pressure in nearly 90 percent of 174 consecutive patients with hypertension. The average blood pressure reduction was -37/-13 mm Hg with the use of diet and fasting. In contrast, when hypertension is managed with drugs, achieving a reduction in blood pressure of -20/-10 mm Hg generally requires at least two medications.

Patients with systolic blood pressure greater than 180 mm Hg or diastolic blood pressure greater than 110 mm Hg (or both) had an average reduction of 60/17 mm Hg by the end of the treatment period; again, these results are highly significant, both statistically and clinically.

In October and December 2002 in the *Journal of Alternative and Complementary Medicine*, Dr. Goldhamer again showed that drug-free dietary intervention was highly effective and could save employers and insurers thousands of dollars per patient, with additional savings expected to result from improved overall health and the continued implementation of health-promoting dietary and lifestyle changes. Dr. Goldhamer's diet and fasting intervention was performed on an inpatient basis; with appropriate patient selection, variations on supplemented fasting can be performed on an outpatient basis with once or twice weekly clinical evaluation.

The five-part "supplemented Paleo-Mediterranean diet" which I first detailed in the [September 2005 issue of \*Nutritional Wellness\*](#), can also be used to promote and maintain long-term reductions in blood pressure and to enhance overall health.<sup>2</sup> In addition to specific diet modifications, certain nutritional supplements should be used in the routine treatment of chronic hypertension. Nutritional supplements

with evidence-based substantiation in the research literature include but are not limited to coenzyme Q10, vitamin D, magnesium, vitamin C, L-carnitine and acetyl-L-carnitine.

Beyond the direct and collateral benefits provided by dietary and nutritional supplementation are the synergistic benefits obtained when dietary improvement is combined with nutritional supplementation (rather than diet alone or supplementation alone). Chiropractic doctors need to know how to use these nutritional interventions safely and effectively. Important clinical characteristics of a given treatment include: 1) expected blood pressure reduction from each treatment; 2) collateral benefits; 3) drug interactions; 4) risks of therapy; 5) identification of responsive or resistant patient groups; and 6) how to implement nutritional interventions in patients taking pharmaceutical drugs.

## Spinal Manipulation

Documentation of the effectiveness of [chiropractic spinal manipulation in the treatment of chronic hypertension](#) was most recently published in the May 2007 issue of the *Journal of Human Hypertension* by Bakris and colleagues. In this randomized trial with 50 hypertensive patients, blood pressure reductions were -17/-10 mm Hg in the treatment group receiving upper cervical chiropractic spinal manipulation versus -3/-2 mm Hg in the placebo group.

The importance of this research is at least threefold. First, obviously it shows that elevated blood pressure can be normalized without drugs; not all health professionals respect this fact. Second, it shows specifically that upper cervical chiropractic treatment can lower blood pressure to a clinically meaningful degree in patients with chronic hypertension. Third and perhaps most important, by showing that cervical spine manipulation can reverse hypertension, this research delivers a paradigm shift in the understanding of the pathophysiology of hypertension.

Up until recent years, most of the pathophysiology of chronic hypertension was ascribed to "idiopathic," neurohormonally mediated changes in renal handling of salt and water; this formed the basis for the medical treatment of chronic hypertension, which was and remains largely focused on the use of diuretics to increase excretion of salt and water. By showing that upper cervical manipulation substantially alleviates chronic hypertension, we have a new paradigm for expanding our concept of the phenomenon of chronic hypertension, namely that chronic hypertension appears to be mediated in part by neurovascular compression at the brainstem.

Although successful treatment of this apparently common neurovascular or "neurogenic" hypertension can be accomplished surgically,<sup>3</sup> I am sure that most clinicians would appreciate the value and safety of a nonsurgical (manipulative) approach, especially one that can be delivered within an integrative clinical context of dietary improvement, nutritional supplementation and wellness coaching.

By virtue of being the only nationally licensed health care profession with training in spinal manipulation/adjusting, diet therapy, nutritional supplementation, and wellness coaching, the chiropractic profession is poised to deliver a packaged solution to the public health catastrophe known as chronic hypertension. The additive and synergistic benefits of such an approach hold enormous promise to improve the health of patients in America, and worldwide.

Given that about one in four adult Americans has hypertension and that the chiropractic profession is poised to deliver evidence-based, comprehensive care for these patients, 65 million hypertensive American patients and potential patients stand to benefit from integrative chiropractic care. The

question that now remains is, will the chiropractic profession stand and deliver the science-based integrative care these patients need?

### *Notes*

1. Details and citations are provided in *Chiropractic Management of Chronic Hypertension*, excerpts from which will be published in *DC* over the course of the next several months.
2. For specifics of the Paleo-Mediterranean diet, read "A Five-Part Nutritional Protocol That Produces Consistently Positive Results." *Nutritional Wellness*, September 2005.
3. See Janetta, et al., in the *Annals of Surgery*, March 1985; and Geiger, et al., in *Lancet*, Aug. 8, 1998.

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