

# Current Research on :

## CHIROPRACTIC HELPS REDUCE HIGH BLOOD PRESSURE LEVELS

While results cannot be predicted for a particular hypertensive patient, a therapeutic trial of chiropractic co-management would seem to be warranted, especially when dysfunction is identified in relevant spinal areas. Proper lifestyle advice and medical care should be concurrent with a regime of adjusting. The authors advise close monitoring of blood pressure for all chiropractic patients on anti-hypertensive medication...the combined effects of the adjustment and the medication might drive a patient's blood pressure below normal.

~ **Weber M. and Masarsky C, Eds.** *Neurological Fitness* Vol.2 No.3 April 1993.

### Peer Reviewed Studies:

1) **The management of hypertensive disease: a review of spinal manipulation and the efficacy of conservative therapeutics** Crawford JP, Hickson GS, Wiles MR.

[J Manipulative Physiol Ther 1986 \(Mar\);9 \(1\): 27-32](#)

- This is a discussion of the literature relating high blood pressure to various factors, including stress and how that relates to the autonomic nervous system.
- **As the author writes (from the abstract):** "Hypertension, therefore, may be regarded as a prime condition warranting specialized care that includes proper education during the formative years, modification of dietary habits in conjunction with daily exercise regimens, and regular spinal maintenance, all of which are covered by modern chiropractic clinical practice."
- **2) Improvements Following the Combination of Chiropractic Adjustments, Diet, and Exercise therapy.** GS, Sauer AD, Wahl DR, Kessinger J. *Chiropractic: The Journal of Chiropractic Research and Clinical Investigation* 1990; 5:37-39.
- **Author's abstract:** Case reports of four individuals and the effects of chiropractic adjustments on their cardiac dysfunctions as monitored by ECG are presented. Patients with varying symptoms had a baseline ECG taken. A treatment plan was implemented consisting of adjustments combined with exercise and diet recommendations. At the end of the treatment period, a follow-up ECG was performed and three of the four patients showed improvement.

**3) Hypertension and the atlas subluxation complex.** Goodman R. *Chiropractic: J of Chiropractic Research and Clinical Investigation*. Vol 8 No. 2, July 1992.

- Six of eight patients under chiropractic experienced relief of symptoms and lowered blood pressure after chiropractic care. The blood pressures of two subjects remained unchanged or increased sometime during the test period. "Although individual readings of the six subjects with lowered blood pressure showed some random variation during the two-month period there was a general decrease in blood pressure. Systolic pressure was lowered by an average of 27 mm Hg, and the diastolic pressure by an average of 13 mm Hg. In several subjects, other symptoms such as low back pain, thoracic tightness, headaches, and general malaise, diminished following the adjustments. Those subjects who were not on medication showed the greatest change."

**4) Preliminary study of blood pressure changes in normotensive subjects undergoing chiropractic care** McKnight ME, DeBoer KF

[J Manipulative Physiol Ther. 1988 \(Aug\);11 \(4\): 261-266](#)

- Seventy-five people were tested after specific chiropractic cervical adjustments. Both systolic and diastolic blood pressure decreased significantly in the adjusted group. No significant changes occurred in the control group. In those with the highest pre-treatment blood pressures, the treatment effect was greatest, indicating that the effective in hypertensives may be even more significant.

**5) Effects of chiropractic treatment on blood pressure and anxiety** Yates RG, Lamping DL, Abram NL, Wright C

[J Manipulative Physiol Ther. 1988 \(Dec\);11 \(6\): 484-488](#)

- In this patient-blinded, assessor-blinded, placebo-controlled study, the authors state that the data "lend support to the hypothesis that chiropractic manipulation of the thoracic spine significantly reduces blood pressure in patients with elevated blood pressure." Both systolic and diastolic blood pressure decreased significantly in the adjusted group. No significant changes occurred in the placebo or control groups. Adjustments were delivered to segments T-1 to T-5.

**6) The effects of upper cervical adjustment upon the normal physiology of the heart.** TranAT, Kirby JD. *J Am. Chiropractic Association*, 1977; 11/S: 58-62.

- Upper cervical adjustments were found to have a hypotensive effect.

**7) Effect of osteopathic manipulative therapy on autonomic tone as evidenced by blood pressure changes and activity of the fibrinolytic system** Fichera AP; Celandier DR

[J Am Osteopath Assoc. 1969 \(Jun\);68 \(10\): 1036-1038](#)

- Manipulation of cervical and thoracic vertebrae reduces moderate (140/90) hypertension. Manipulation caused a decrease in plasma fibrinogen, favoring the PSNS.

**8) Changes in presence of a segmental dysfunction pattern associated with hypertension: Part 2. A long-term longitudinal study.** Johnston WL, Kelso AF

[J Am Osteopath Assoc. 1995 \(May\);95 \(5\): 315-318](#)

- The C6,T2,T6 pattern's long-term persistence in hypertensive subjects and changes in its presence corresponding to the subjects' hypertensive status indicate an important relationship between this pattern of segmental motion dysfunctions and disturbances in regulation of blood pressure.

**9) Effects of Chiropractic Treatment on Blood Pressure and Anxiety: A Randomized Controlled Trial**

Yates RG, Lamping DL, Abram NL, Wright C

[J Manipulative Physiol Ther 1988 \(Dec\);11 \(6\): 484-488](#)

- Abstract: This study examined the effects of chiropractic adjustments of the thoracic spine (T1-T5) on blood pressure and state anxiety in 21 patients with elevated blood pressure. Subjects were randomly assigned to one of three treatment conditions: active treatment, placebo treatment, or no treatment control. The adjustments were performed by a mechanical chiropractic adjusting device (Activator adjusting instrument). Dependent measures obtained pre- and post-treatment included systolic and diastolic blood pressure, and state anxiety. Results indicated that systolic and diastolic blood pressure decreased significantly in the active treatment condition, whereas no significant changes occurred in the placebo and control conditions. State anxiety significantly decreased in the active and control conditions. Results provide support for the hypothesis that blood pressure is reduced following chiropractic treatment. Further study is needed to examine the long-term effects of chiropractic treatment on blood pressure.

Case Studies:

**1) Chiropractic Management of a Hypertensive Patient: A Case Study** Plaugher G, Bachman TR. [J Manipulative Physiol Ther. 1993 \(Oct\);16 \(8\): 544-549](#)

- A case study of a 38-year-old male presented with a complaint of hypertension of 14 years duration and side effects of medication (Minipress and Corgard) which included bloating sensations, depression, fatigue, and impotency. Chiropractic analysis revealed vertebral subluxation complex at levels C6-7, T3-4, and T7-8 motion units; adjusted using Gonstead technique. After three visits patient's M.D. stopped the Minipress and reduced the Corgard. After six adjustments Corgard was reduced again. All medications were stopped after seven adjustments. Medication side effects had abated as well. After 18 months patient's blood pressure remained at normal levels.

**2) Hypertension: a case study.** McGee D. *Chiropractic: J of Chiropractic Research and Clinical Investigation.* Vol.7. No.4, Jan. 1992.

- Case history of a 46-year-old woman's rapid decrease in blood pressure following initial chiropractic adjustment.

Additional Publications:

**1) An effect of sacro occipital technique on blood pressure.** Unger J; Sweat S; Flanagan S, Chudowski S. *Proceedings of the International Conference on Spinal Manipulation.* 1993 A/M. pp 87.

- Data demonstrates that a single chiropractic intervention can bring about a significant reduction in blood pressure in a hypertensive group of subjects. Not only was the reduction in systolic blood pressure statistically significant; more important was the clinical significance of this effect.

**2) Randomized clinical trial of chiropractic adjustments and brief message treatment for essential hypertension: A pilot study.** Plaugher G, Meker W, Shelsy A, Lotun K, Jansen R. *Conf Proc Chiro Cent Found* 1995; Jul: 366-367.

**3) Conservative management of patients with mild hypertension.** Mootz RD *Top Clin Chiro* 1995; 2:37-44.

**4) Evidence for a possible anti-hypertensive effect of basic technique apex contact adjusting.** Dulgar G, Hill D, Sirucek A, Davis BP, *ACA J of Chiropractic*, 1980;14:97-102.

*References from the Koren Publications' brochure:*

- Healthier Blood Pressure. Science News, Vol. 146 p.200. Sept. 24, 1994. Bernard, O.D., Richmond, Michigan, Letter to the Editor.
- The People's Doctor Vol. 8, No.5., 1986. Mendelsohn R.S., The People's Doctor Newsletter Vol. 8, No.5., 1986.
- Norris T.A., Study of the effect of manipulation on blood pressure. Academy of Applied Osteopathy, 1964 Year Book pp. 184-188.
- Blood H.A., Manipulative Management of Hypertension, Academy of Applied Osteopathy, 1964 Yearbook pp. 189-195.
- Yates et. al. Effects of Chiropractic Treatment on Blood Pressure and Anxiety: A Randomized, Controlled Trial. J Manipulative Physiol Ther 1988; 11:484-488.
- Gutzeit K., The Vertebral Column As A Factor In Disease. Dtsch. Med. Wschr., 1 (1951):3-7.
- Fichera, A.P., Calender, D.R. Effect of Osteopathic Manipulative Therapy on Autonomic Tone as Evidenced by Blood Pressure Changes and Activity of the Fibrinolytic System. June, 1969: 1036-1038.
- Ward L.E., Spinal Column Stressology, Spinal Stress Seminars, Long Beach, CA 1982.