

OPTIMAL HEALTH UNIVERSITY™

Presented by Dr. Wayne Terai

Chiropractic for Hypertension

Most people know that chiropractic care prevents back pain. But did you know that chiropractic care may alleviate a myriad of other disorders, including high blood pressure (hypertension)? Dr. Terai encourages patients to familiarize themselves with the following information and share it with friends and family who are concerned about hypertension.



Research Shows That Chiropractic Prevents High Blood Pressure

A report in the *Journal of Human Hypertension* reveals that chiropractic adjustments dramatically lower high blood pressure (BP). The *Journal of Human Hypertension* is a member of the prestigious family of *Nature Publishing Group* journals (*J Hum Hypertens* 2007;21:347-52).

The study was lead by George Bakris, MD, the director of the University of Chicago Hypertension Center. The findings of the study were so positive that even he was stunned. In an interview with WebMD Dr. Bakris admits that “When the statistician brought me the data, I actually didn’t believe it. It was way too good to be true. The statistician said, ‘I don’t even believe it.’ But we checked for everything, and there it was.”

The Study Participants

The experiment enrolled 50 patients with Stage 1 hypertension, who were not taking medication for the condition. The group consisted of 70 percent men and 30 percent women. During an eight-week period, half of the subjects underwent chiropractic care for vertebral subluxations. A control group received a “sham” procedure.

Vertebral subluxations are areas in the spine where movement is restricted or bones (vertebrae) are slightly misaligned. This common condition is triggered by physical, chemical and emotional factors. Doctors of chiropractic, like Dr. Terai, correct vertebral subluxations with gentle and safe maneuvers called **chiropractic adjustments**.

The Atlas/Hypertension Connection

In the study, those undergoing chiropractic care received chiropractic adjustments for restoration of vertebral subluxations involving the spine of the upper neck (cervical spine). Specifically, they received adjustments to the vertebra at the top of the spine, directly below the skull. This vertebra is known as the “atlas.”

The study’s authors speculate that vertebral subluxation of the atlas results in restricted blood flow to the brainstem, in turn spawning hypertension.

Marshall Dickholtz, DC, is the chiropractor who performed the adjustments on the study participants. In an interview with WebMD he explains that “at the base of the brain are two centers that control all the muscles of the body. If you pinch the base of the brain — if the atlas gets locked in a position as little as a half a millimeter out of line — it doesn’t cause any pain but it upsets these centers.”

(Dr. Terai also frequently detects vertebral subluxations in the upper cervical spine of patients with high BP.)

The Study Findings

Compared with members of the control group, those undergoing chiropractic care enjoyed significant drops in both systolic blood pressure (first, or upper number) as well as diastolic blood pressure (second, or lower number).

Specifically, at the close of the eight-week study, systolic BP fell by an average of 17 millimeters of mercury (mm Hg) among those receiving chiropractic care, compared with 3 mm Hg among those undergoing the sham procedure. And, diastolic BP dropped an average of 10 mm Hg among chiropractic patients, compared with 2 mm Hg among control participants.

No adverse effects were detected among the study participants.

“Restoration of atlas alignment is associated with marked and sustained reductions in BP similar to the use of two-drug combination therapy,” conclude the study’s authors. This finding suggests that chiropractic care may prove to be an effective alternative to standard medication for hypertension.

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A Wealth of Additional Research

The *Journal of Human Hypertension* study isn't the first to suggest that chiropractic may lower BP. Previously released reports also add to mounting research indicating that chiropractic adjustments lower blood pressure.

For instance, to investigate the effects of adjustments on systolic blood pressure (first, or higher number), Gary A. Knutson, DC, conducted two experiments (*J Manipulative Physiol Ther* 2001;24:101-9).

The first experiment compared 40 chiropractic patients with upper neck (cervical) vertebral subluxation with an equal number of patients without signs of subluxation. The second experiment enrolled 30 patients with upper cervical subluxation.

Subjects in both groups either underwent adjustments or rested their head in a specific position without receiving an adjustment. Results showed that "In test one, subjects receiving adjustment had a significant decrease in systolic blood pressure whereas resting subjects did not. In test two, the pre/post-rest change in systolic blood pressure was not significant. The systolic blood pressure changed significantly from post-rest readings to post-adjustment readings."

Another investigation found that six out of eight patients studied enjoyed significantly reduced BP following chiropractic care (*J of Chiro Res and Invest* 1992;8).

"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. ... Those subjects who were not on medication showed the greatest change." (*J of Chiro Res and Invest* 1992;8.)

Another investigation conducted at Palmer College of Chiropractic in Davenport, Iowa, followed 75 stu-

dents. Researchers divided the study participants into two groups, based on whether a chiropractic evaluation detected vertebral subluxation in the spine of the upper neck (cervical spine). The researchers then performed chiropractic adjustments on those students with vertebral subluxations (*J Manipulative Physiol Ther* 1988;11:261-6).

Compared with blood pressure prior to the adjustments, blood pressure five minutes following chiropractic adjustments was significantly lower.

"The difference in the mean blood pressures was small and was brought about by 14 of the Experimental subjects who experienced a clinically relevant 10-20 mm hg drop," conclude the study's authors (*J Manipulative Physiol Ther* 1988;11:261-6).

Not Just The Neck

Not all studies involve the cervical spine. One analysis conducted at Canadian Memorial Chiropractic College in Toronto, Ontario, looked at the effect of chiropractic adjustments on the spine of the upper back, which is known as the thoracic spine (*J Manipulative Physiol Ther* 1988;11:484).

The assessment looked at 21 patients with high blood pressure and anxiety.

Study participants were divided into three groups. One group received chiropractic adjustments to the thoracic spine. A second group received a "sham" placebo treatment. And a third group received no treatment.

Systolic and diastolic blood pressure decreased significantly among patients who received adjustments. On the other hand, no significant changes occurred in the placebo and control groups (*J Manipulative Physiol Ther* 1988;11:484-8).

The Big Picture

Chiropractic care encompasses more than chiropractic adjustments. It also focuses on creating wellness through a health-promoting way of life known as the **chiropractic lifestyle**. This in-

volves educating patients about various chemical, physical and emotional causes of vertebral subluxation.

Research indicates that the following lifestyle factors prevent hypertension. The doctor encourages patients to incorporate as many as possible into their daily routine.

- ✓ A nutritious diet
- ✓ Not smoking
- ✓ Avoiding passive smoke
- ✓ Not holding grudges
- ✓ Regular daily aerobic exercise
- ✓ Managing emotional stress
- ✓ Stress reduction techniques
- ✓ Including humor in your life
- ✓ Owning a pet
- ✓ Supportive personal relationships
- ✓ A supportive social network
- ✓ Maintaining optimal body weight
- ✓ Spiritual practices

It's also crucial to keep in mind that several medications may up the risk of hypertension. If you are concerned that a medication you are taking may be linked to high blood pressure, but don't know how to find out for sure, ask the doctor for help investigating the side effects of the particular medication.

In addition, various dietary supplements have been shown to prevent hypertension. Please talk to the doctor about what specific supplementation program is right for you.



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