

Atlas vertebra realignment and achievement of arterial pressure goal in hypertensive patients: a pilot study

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KEY POINTS FROM DAN MURPHY

- 1) Anatomical abnormalities of the cervical spine at the level of the Atlas vertebra are associated with relative ischaemia of the brainstem circulation and increased blood pressure.
- 2) The precise chiropractic spinal adjustments delivered in this study were able to produce important reductions in both systolic (17 mm HG) and diastolic (10 mm Hg) blood pressure that was sustainable over a 8 week period with "no adverse effects."
- 3) Restoration of Atlas alignment is associated with marked and sustained reductions in BP similar to the use of two-drug combination therapy.
- 4) "Minor misalignment of the Atlas vertebra can potentially injure, impair, compress and/or compromise brainstem neural pathways."
- 5) "Changes in the anatomical position of the Atlas vertebra and resultant changes in the circulation of the vertebral artery lend itself to worsening of hypertension."
- 6) "The findings of this pilot study represent the first demonstration of a sustained BP lowering effect associated with a procedure to correct the alignment of the Atlas vertebra. The improvement in BP following the correction of Atlas misalignment is similar to that seen by giving two different antihypertensive agents simultaneously."
- 7) "Misalignment of the Atlas vertebra can be determined by assessment of the alignment of the pelvic crests. This should be considered in those who have a history of hypertension and require multiple medications for treatment. Additionally, it should be considered in those with refractory hypertension and a history of neck injuries, independent of the presence of pain. Note that pain was not present in any of the patients randomized in this study." **[Very Important]**

THIS STUDY SUPPORTS THE FOLLOWING:

- 1) Very small displacements of the atlas can adversely affect blood pressure.
- 2) Very small displacements of the atlas affect supine leg length.
- 3) Very small displacements of the atlas can affect upright spinal and pelvic posture and the symmetry of left-right weight bearing.
- 4) The evaluation of small displacements of the atlas requires 3 carefully exposed and protractor measured radiographs of the cervical spine.
- 5) NUCCA chiropractic adjustments can improve clinically important very small displacements of the atlas.
- 6) The evaluation of biomechanical changes in atlas displacement following chiropractic adjustment requires post-treatment radiographic exposure and measurements.
- 7) Chiropractic should not be limited only to those with aches and pains. The patients in this study did not have aches and pains, but they suffered from hypertension. This study further supports that chiropractic benefits systemic health and wellbeing.
- 8) This study supports the benefit of chiropractors exposing x-rays on patients for biomechanical reasons.