Dynamic Chiropractic

Cervical Spine Adjustment Increases Active ROM, Study Finds

Editorial Staff

DES MOINES, Iowa -A recent double-blind, randomized, controlled study[1] found that spinal manipulation to the cervical spine (performed by chiropractors) increases active range of motion.

The study, conducted at the outpatient clinic of the Phillip Chiropractic Research Centre, RMIT University, Melbourne, Australia, randomly assigned 105 patients with cervicogenic headache into two groups. Following a three-week baseline observation period, The first group received three weeks of sham manipulation (nontherapeutic manipulation, then three weeks of spinal manipulation to the cervical spine, and finally three weeks of no treatment. After the baseline period, Group II first received three weeks of cervical spinal manipulation, followed by three weeks of no treatment, and then three weeks of sham manipulation. At weeks 0, 3, 6, 9, and 12, cervical range of motion was measured by doctors unaware of the treatment the patient was receiving. The patients did not know what was being measured.

The chiropractic researchers found "a consistent and statistically significant increase in active range of motion in the cervical spine after manipulation."

"It is the fact that our range-of-motion study deals with a physiological variable exclusively (in contrast to symptoms, feelings, perceptions, etc.), that makes it so important," said study author Niels Nilsson,DC,MD,PhD, from the Department of Sports Science and Clinical Biomechanics at the University of Southern Denmark in Odense. "Chiropractors are often accused of 'talking' their patients well, suggesting that spinal manipulative therapy does not have any physiological effects on objective body function. This paper pulls the plug on that reasoning."

"Increased ranges of motion have been reported to accompany spinal manipulation," said Anthony Rosner,PhD, director of research for the Foundation for Chiropractic Education and Research. "But in the past there have been no clear comparisons with the deactivated Pettibon instrument [the sham manipulation] or with clearly defined no-treatment periods. Establishing increased ranges of motion confirms the biomechanical effect that previously has been presumed to accompany spinal manipulation. Furthermore, in many instances it appears that the effect is maintained with no further interventions for at least 3-week periods during the course of the study. In these respects, this study is significant and offers an important clue to more fully understanding and appreciating the consequences of spinal manipulation."

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Reference

1. Whittingham W, Nilsson N. Active range of motion in the cervical spine increases after spinal

manipulation (toggle recoil). November/December 2001 *JMPT;*24(9). The abstract for this study was published in the 2-11-02 issue of *DC.* A copy of the abstract is on our website at www.chiroweb.com/archives/20/04/04.html.

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