

CHIROPRACTIC & HEALTH: A Natural Connection

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Chiropractic Adjustments Improve Sensory Input, Body Awareness, and Coordination

KEY FINDINGS

“These results suggest that asymptomatic people with a history of SCNP (sub-clinical neck pain) have reduced elbow JPS (joint position sense) accuracy compared to those with no history of any neck complaints.” “Furthermore, the results suggest that (chiropractic) adjusting of dysfunctional cervical segments in people with SCNP can improve their upper limb JPS accuracy.”

“There is evidence in the literature to suggest that muscle impairment occurs early in the history of onset of neck complaints and that this muscle impairment does not automatically resolve even when neck pain symptoms improve. Some authors have therefore suggested that the deficits in proprioception and motor control rather than the pain itself may be the main factors defining the clinical picture and chronicity of different long-term pain conditions.”

CLINICAL IMPORTANCE

Key Concepts:

“The results of this study suggest that asymptomatic people with a history of recurring neck pain, stiffness, or ache have reduced elbow JPS accuracy compared to those with no history of any neck complaints.”

“Spinal manipulation (adjustments) delivered to dysfunctional cervical segments in people with subclinical neck pain improved upper limb JPS accuracy in this group.”

“These findings support the concept that neck joint dysfunction can impair the way proprioceptive input from the upper limb is processed and provides evidence that this can be improved by cervical spine manipulation.”

“This study supports previous research that suggests that altered sensory processing and motor control may be implicated in the development of chronic and recurrent neck pain.”

“The improvements we observed might be even more impressive in a group with a greater level of pain and disability.”

Take-Home Points

When joints do not move properly due to injury or lack of mobility from disuse, the receptors in the associated joints, tendons, ligaments, and muscles do not fire properly and do not send sufficient sensory information to the brain that is required for proper body awareness and coordination/motor control.

Chiropractic adjustments restore mobility, restore sensory input to the brain, and restore neuromuscular function/coordination.

Chiropractic adjustments don't just alleviate pain, they alleviate the underlying dysfunction leading to pain and thus restore not just comfort, but function and quality of life.

Haavik and Murphy (2011) Subclinical Neck Pain and the Effects of Cervical Manipulation on Elbow Joint Position Sense. Journal of Manipulative and Physiological Therapeutics Vol 34, No 2; 89-96.