Cervical Spinal Manipulation

- Migraine resolution in a patient receiving Cox() flexion-distraction and thoracolumbar spinal manipulative therapy: a case report
- A Retrospective Multicenter Analysis of Osteopathic Manipulation in Academic and Community Settings
- Comparative safety and efficacy of manual therapy interventions for cervicogenic headache: a systematic review and network meta-analysis
- Development and validation of a quick screening tool for predicting neck pain patients benefiting from spinal manipulation: a machine learning study
- Modification of the toronto rehabilitation institute-hand function test for integration into robot-assisted therapy: technical validation and usability
- Effect of cervical manipulation on blood pressure and heart rate variability responses in adults: A scoping review
- A description of serious adverse events following spinal manipulative therapy for adults with history of spine surgery: a single institution retrospective chart review
- Efficacy and safety of spinal manipulative therapy in the management of acute neck pain: a systematic review and meta-analysis

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Cervical spinal manipulation, also known as cervical adjustments or neck adjustments, is a specific type of spinal manipulation that focuses on the cervical spine, which is the portion of the spine located in the neck. This form of manual therapy is often performed by chiropractors, osteopaths, or physical therapists. The goal of cervical spinal manipulation is to address issues such as neck pain, headaches, and certain musculoskeletal conditions affecting the cervical spine.

Here are some key points regarding cervical spinal manipulation:

Technique: Cervical spinal manipulation involves applying controlled, rapid force to the joints of the cervical spine, typically with a quick and precise thrust. This can result in a popping or cracking sound, similar to what might be heard during spinal manipulation of other regions.

Conditions Treated: Cervical spinal manipulation is commonly used to address conditions such as neck pain, cervical joint dysfunction, tension headaches, and certain types of migraines. Some practitioners also claim that it may help with conditions affecting the nervous system.

Chiropractic Care: Chiropractors are healthcare professionals who commonly perform cervical spinal manipulation. They may use adjustments to restore proper alignment and movement of the cervical vertebrae, with the belief that this can positively impact the nervous system and overall health.

Safety Considerations: While cervical spinal manipulation is generally considered safe when performed by qualified and trained practitioners, there are potential risks. Rare complications include injury to blood vessels in the neck, nerves, or spinal cord. Individuals must provide a thorough medical history and undergo a careful examination before undergoing cervical manipulation.

Patient Selection: Not everyone is a suitable candidate for cervical spinal manipulation. Healthcare providers carefully assess individual cases to determine if the intervention is appropriate. Factors such as the nature of the condition, the patient's health status, and any contraindications are taken

into account.

Evidence and Research: The effectiveness of cervical spinal manipulation is a subject of ongoing research. While some studies suggest potential benefits for certain conditions, the evidence is not uniform, and more research is needed to establish its efficacy and safety conclusively.

Informed Consent: Before undergoing cervical spinal manipulation, practitioners typically obtain informed consent from patients. This involves explaining the procedure, potential benefits, risks, and alternative treatment options.

As with any medical intervention, individuals considering cervical spinal manipulation should consult with their healthcare provider. Open communication, a thorough assessment, and a clear understanding of the potential risks and benefits are essential for making informed decisions about treatment options

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Chiropractic cervical spinal manipulations have several complications and can result in vascular injury, including traumatic dissection of the vertebral arteries. A 43-year-old woman was admitted to the emergency department after performing a self-chiropractic spinal manipulation. She experienced headaches and vomiting and was unresponsive with severe hypertension at the time of hospital admission. Clinical computerized tomography angiography showed narrowing of the right vertebral artery but was inconclusive for dissection or thrombosis. At autopsy, subacute dissection of the right vertebral artery was identified along with cerebral edema and herniation. A small peripheral pulmonary thromboembolism in the right lung was also seen. Neuropathology consultation confirmed the presence of diffuse cerebral edema and acute hypoxic-ischemic changes, with multifocal acute subarachnoid and intraparenchymal hemorrhage of the brain and spinal cord. This case presents a unique circumstance of a fatal vertebral artery dissection after self-chiropractic manipulation that, to the best of our knowledge, has not been previously described in the medical literature [1)].

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Fink C, Bryce CH, Knight LD. Self-Chiropractic Cervical Spinal Manipulation Resulting in Fatal Vertebral Artery Dissection: A Case Report and Review of the Literature. Am J Forensic Med Pathol. 2024 Feb 1. doi: 10.1097/PAF.0000000000000912. Epub ahead of print. PMID: 38300708.