

# Policy on Stroke



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## The CAC Policy on Chiropractic Adjustment & Risk of Stroke

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The practice of chiropractic is based on the immutable scientific truth that human beings are self-regulating, self-healing organisms and that these life sustaining innate abilities are coordinated by the central nervous system. Chiropractic recognizes the fact that vertebral subluxations interfere with normal central nervous system function and thus compromise normal physiology and therefore affect global health and quality of life. While these physiological effects may manifest in diverse health phenomena, the primary focus of chiropractic is on the assessment, detection and correction of vertebral subluxations.

In all health-care interactions, one must analyze the benefit of the proposed model of care and any risks associated with it. It has been proposed by some that there is an inherent risk of damage to the vertebral artery resulting in stroke for those receiving chiropractic care, specifically cervical adjustments. Although there have been risk estimates of an association of stroke cited (ranging from 1 in 1 million to 1 in 5.6 million), analysis of valid scientific data reveals that there is not a single scientific study that has ever shown a chiropractic adjustment as the cause of a stroke. As world-renowned epidemiologist Dr. David Sackett has testified, the relationship between adjustment and stroke is so weak and so rare and the scientific data so lacking that it is impossible to validly estimate if there is any risk of stroke associated with chiropractic care.

To date there have been seven studies of the possible adverse effects of chiropractic care (JMPT (1996); 19(7):441-5, ScanJPrimHealthCare (1996); 14(1):50-3, JMPT (1997); 20(8):511-5, Spine (1997); 22(4):435-440, JRSocMed (2000); 93(5):258-9, JMPT (2004); 27:16-25, ManTher (2004); 9(3):151-6), Spine (2007) 32(21):2375-2378). All have indicated that the worst thing one could expect as a result of chiropractic adjustments are mild muscle ache, headaches, fatigue, dizziness, nausea and transient vasodilative effects.

Furthermore, the only study in history that has ever looked at the mechanical effects of a chiropractic cervical adjustment on the vertebral artery (JMPT 2002;25:504-10) indicated that rotary movement of the neck (representing the most forceful chiropractic techniques) could only stretch the vertebral artery to 6.2% of its resting length, and that to damage it would require a stretch equal to 162% of its resting length. The authors concluded that their data showed that it was not physically possible to injure the vertebral artery by cervical adjusting.

Perhaps the most interesting (and quite possibly definitive) study on the topic (Spine 2008;33(4S):S176-S183) indicated that the risk of stroke for patients under the care of a doctor of chiropractic and a medical physician were identical, and less than 1 in 1 million. Considering that the vast majority of physicians don't utilize cervical adjustments as part of their treatment regimen, these results would appear to indicate that cervical adjustments in and of themselves are not a causative factor of strokes.

**The policy of the Chiropractic Awareness Council on the topic of Chiropractic Cervical Adjustment and Stroke Risk is as follows:**

We recognize that strokes and other unfortunate incidents are a fact of life. We also recognize that these incidents are often unforeseen and can happen to anyone unexpectedly. As no valid scientific research has ever established a causative link between chiropractic adjustments and stroke, it must be concluded that the risk of such an event is not more likely to happen to a patient under chiropractic care, and as such, cannot be scientifically considered an inherent risk of care. Therefore, from an evidence-based perspective, the Chiropractic Awareness Council does not accept any inference that there is a significantly increased risk of stroke associated with chiropractic cervical adjustments