

VBA STROKE AND CHIROPRACTIC CARE: FACTS AND FALLACIES



You may have read articles or reports that implied that a spinal adjustment may increase the risk for developing a vertebrobasilar (VBA) stroke.

The fact is there is no reliable medical or chiropractic evidence demonstrating that cervical manipulation is a cause of VBA stroke.

Persons who experience cervical artery dissection (CAD) and subsequent stroke often experience neck pain and headache as their initial symptoms.

Neck pain and headache are conditions for which many patients seek chiropractic or medical care. In this context chiropractic care as well as medical care is associated with the development of CAD and stroke. Association, however, is not causation.

Regardless of whether a person seeks chiropractic care or medical care, a very small percentage of them go on to experience a dissection and possibly a stroke. Studies involving millions of patients over several years have not shown any increased risk for dissection and stroke among persons who seek chiropractic care versus primary medical care.

The most recent meta-analysis by neurosurgeons at the Department of Neurosurgery, Penn State Hershey Medical Center and Johns Hopkins University evaluating this question is entitled: *Systematic Review and Meta-analysis of Chiropractic Care and Cervical Artery Dissection: No Evidence for Causation*. Numerous peer-reviewed published articles in medical and chiropractic journals continue to back up these findings.

FOR EXAMPLE:

- In the journal *Spine* (Cassidy et al, 2008), researchers studied the population of the province of Ontario, Canada over nine years finding 818 VBA stroke events in that population and concluded that patients would have likely had a stroke whether or not they received chiropractic care or medical care because they were already experiencing symptoms that were ultimately related to an arterial dissection. They wrote:
“We found no evidence of excess risk of VBA stroke with associated chiropractic care compared to primary care.”
- In *Chiropractic & Manual Therapies* (Kosloff et al, 2015), researchers evaluated a population base equal to five percent of the population of the U.S. over a period of three years finding 1,829 VBA stroke cases. Authors concluded:
“We found no significant association between exposure to chiropractic care and the risk of VBA stroke. We conclude that manipulation is an unlikely cause of VBA stroke.”

- In *Cureus* (Church et al, 2016), researchers conducted a higher level epidemiologic study known as a systematic review and meta-analysis addressing the question of chiropractic care and cervical artery dissection (CAD) with related stroke. They concluded:

“There is no convincing evidence to support a causal link between chiropractic manipulation and cervical arterial dissection.”

Things to remember about CAD and the development of a stroke:

- CADs are a problem of a blood vessel that has the potential to cause neurological problems, it is not primarily a neurological problem.
- CADs occur 3-4 times in a population of 100,000 people and they may or may not be related to a specific activity.
- Sudden onset of neck pain and headache, especially when combined with problems of balance, speech, facial movement, arm weakness, visual disturbances and difficulty swallowing should be reported in detail to your health care provider(s) or to the emergency room.
- A personal or family history of connective tissue disorders, such as Marfan’s Syndrome or fibromuscular dysplasia, warrants additional consideration with a new presentation of neck pain and/or headache with neurological symptoms and this information should be shared with your health care provider.