PALMER College of Chiropractic
The Trusted Leader in Chiropractic Education®

Does Chiropractic Care Increase the Risk of Vertebrobasilar Stroke?

The vertebral artery (VBA), located in the neck, supplies blood to the brain. If a tear (also called a dissection) occurs in the VBA, the resulting blood clot may obstruct blood flow, causing stroke symptoms.

In the most definitive study on this topic, authors looked at 818 people in a claims database to determine whether neck extension and rotation during chiropractic care increases the risk of VBA dissection and stroke. The authors found the following 12 sessions of SMT yielded the most favorable pain reduction and functional improvement of the 4 dose levels

- VBA dissections and strokes are extremely rare.
- Most cases of VBA dissection are spontaneous, with no obvious trauma as the cause.
- Eighty percent of patients experiencing a VBA stroke experience symptoms of VBA dissection.
- Symptoms of VBA dissection include neck pain and headache.
- People are no more likely to have visited a doctor of chiropractic than a medical doctor prior to having a VBA dissection.

Take Home Message

Patients are just as likely to have visited a medical physician as received chiropractic care prior to a VBA stroke. The association between VBA stroke and both chiropractor and medical doctor visits is most likely explained by patients with neck pain and headache (VBA dissection symptoms) seeking relief from health care providers before their VBA stroke. Health care professionals should be aware of, and able to identify, the signs and symptoms of a stroke in progress.

For more information regarding this study, or to access the complete article go to:
https://pubmed.ncbi.nlm.nih.gov/18204390/

Practical Application

This is the only study to date that specifically evaluates “dosing” of chiropractic care for patients with low back pain. This study lays a foundation for future research in this arena. Answering questions related to finding the most effective dose for patients with specific conditions has far-reaching health policy implications for providers, patients, and payers.

For more information, the complete article is online at:
http://www.sciencedirect.com/science/article/pii/S1529943013013909#

Reference

Cassidy JD, Boyle E, Côté P, He Y, Hogg-Johnson S, Silver FL, Bondy SJ. **Risk of vertebrobasilar stroke and chiropractic care: results of a population-based case-control and case-crossover study**. *Spine* 2008;33:176-83.