

# Does *Neck Manipulation* Cause Stroke?

Media outlets have highlighted a published estimate that 1 in 5.7 million chiropractic patients suffers a stroke in the days following treatment; and some individuals question if neck manipulation could be the cause.

## Research *Answers* the Question

Four major studies have answered this question after examining the relationship of stroke and neck manipulation.

1

DATA  
100 MILLION  
PERSON YEARS

CONCLUSION  
*"No evidence of excess risk of stroke associated chiropractic care compared to primary care."* <sup>(1)</sup>

2

DATA  
39 MILLION PATIENTS

CONCLUSION  
*"No significant association between stroke and chiropractic visits. Manipulation is an unlikely cause of stroke."* <sup>(2)</sup>

3

DATA  
ALL PUBLISHED DATA

CONCLUSION  
*"No causal link between chiropractic manipulation and Cervical Artery Dissection (stroke)."* <sup>(3)</sup>

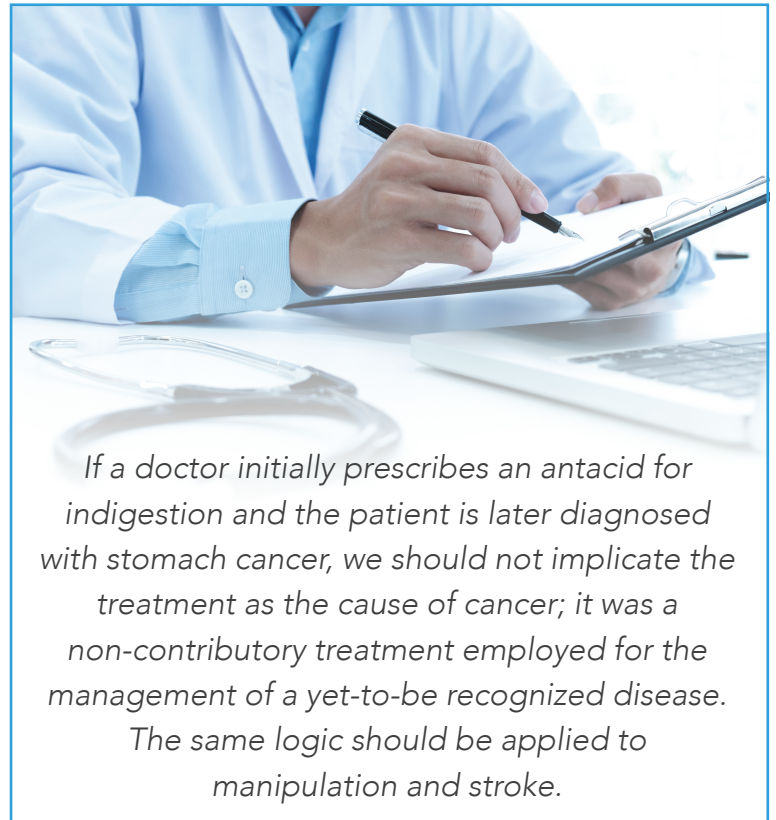
4

DATA  
15, 523 CASES

CONCLUSION  
*"No excess risk of stroke after chiropractic care."* <sup>(4)</sup>

# Problems Trigger *Doctor Visits,* Not Vice Versa

Each study has concluded that chiropractic spinal manipulation does not cause stroke, however, patients with symptoms of an impending stroke have a higher likelihood to seek care from a variety of providers, including chiropractors. Chiropractic or medical treatment is not the cause of the stroke, but rather a non-contributory mid-point of a developing crisis.



*If a doctor initially prescribes an antacid for indigestion and the patient is later diagnosed with stomach cancer, we should not implicate the treatment as the cause of cancer; it was a non-contributory treatment employed for the management of a yet-to-be recognized disease. The same logic should be applied to manipulation and stroke.*

## 76% Lower

One recent study concluded: "it is unlikely that chiropractic care is a significant cause of injury. In fact, risk of injury was 76% lower among subjects with a chiropractic office visit than those who saw a primary care physician." (5)

## Chiropractic Care Has An *Exceptional* Safety Record

Chiropractic manipulation has an exceptional record of safety, but like all treatments, it is not without risk. Patients should discuss any concerns with their provider. Following careful assessment, you and your chiropractor can determine the best and safest mode of care.

### References

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2. Kosloff TM, Elto D, Tao J, Bannister WM. Chiropractic care and the risk of vertebrobasilar stroke: results of a case-control study in U.S. commercial and Medicare Advantage populations. *Chiropractic & Manual Therapies* (2015) 23:19
3. Church E W, Sieg E P, Zalatimo O, et al. (February 16, 2016) Systematic Review and Meta-analysis of Chiropractic Care and Cervical Artery Dissection: No Evidence for Causation. *Cureus* 8(2): e498.
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5. Whedon JM, et al. Risk of Traumatic Injury Associated With Chiropractic Spinal Manipulation in Medicare Beneficiaries Aged 66 to 99 Years. *Spine* 2015;40:264–270