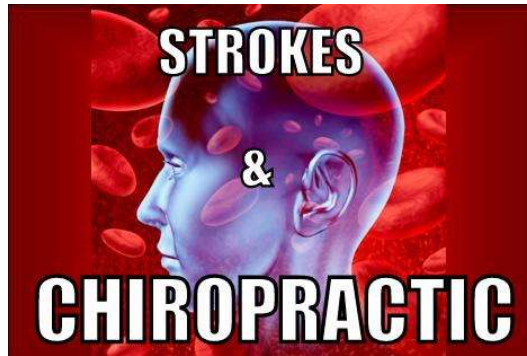


# Can a Chiropractic Adjustment Cause a Stroke???



A stroke, or "brain attack," occurs when blood circulation to the brain fails. Brain cells can die from decreased blood flow and the resulting lack of oxygen. The most common type of stroke (87% of all strokes) is the ischemic stroke.

## **Ischemic Stroke:**

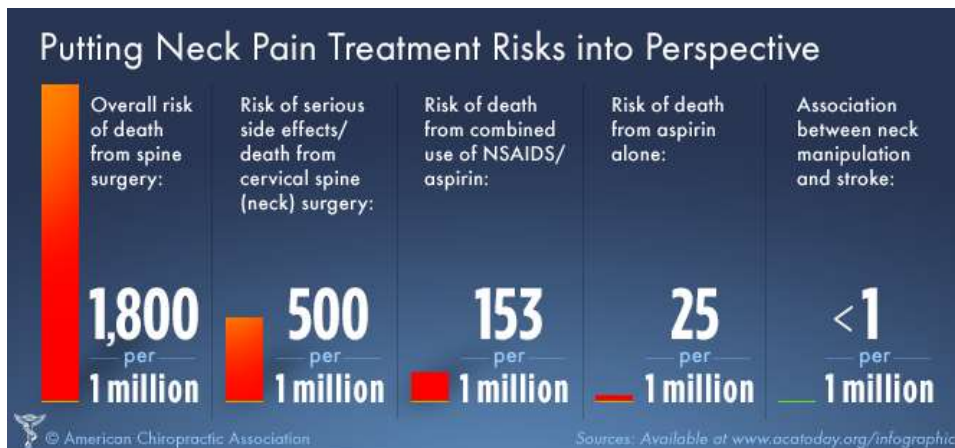
- A blockage of a blood vessel in the brain or neck, usually by a blood clot
- A portion of the brain becomes deprived of oxygen
- 32,000 brain cells die in one second; 1.9 million brain cells die in less than one minute
  - Vertebral Artery Dissection (VAD), which is an expanding hematoma due to an intimal tear in the innermost lining of the arterial wall, can result in an ischemic stroke.

There is a lot of misinformation out there claiming that a chiropractic adjustment to the cervical spine (the neck) can cause a stroke. What you'll most often hear is "Chiropractic adjustments have been associated with stroke." VAD strokes have also been **associated with (not caused by)**:

Yoga  
Vomiting

Nose blowing  
Sexual activity

Sneezing  
Anesthesia



Chiropractic care is **NOT** a risk factor for stroke. The likelihood of having a VAD stroke following a chiropractic adjustment is the same as with blowing your nose.<sup>3</sup>

A 2011 study, which analyzed 9 years' worth of data from a population of 110 million patients, concluded that a VAD stroke is a very rare event, and that the risk of VAD stroke following a visit to a chiropractor's office appears to be no different than the risk of VAD stroke following a visit to the office of a primary care medical physician (PCP) for treatment of neck pain, headaches, etc.<sup>3</sup>

What **DOES** cause a stroke?<sup>2</sup>

- High blood pressure
- Atherosclerosis - a disease of the arteries characterized by the deposition of plaques of fatty material on their inner walls (caused by high blood pressure, smoking, or high cholesterol)
- Diabetes
- Traumas

Risk factors –

- Smoking
- High blood pressure
- Heart disease
- Collagen disorders
- Recent motor vehicle accident

The majority of stroke risk can be avoided by living a healthy lifestyle –

- Get your nervous system checked
- Exercise regularly
- Eat a healthy diet
- Reduce stress
- Quit smoking!

#### REFERENCES:

<sup>1</sup>Risk of Vertebrobasilar Stroke and Chiropractic Care, Cassidy, SPINE, Volume 33, number 4S, pp. S176-S183

<sup>2</sup>CDC Million Heats: Strategies to reduce the prevalence of leading cardiovascular disease risk factors ([/mmwr/preview/mmwrhtml/mm6036a4.htm?s\\_cid=mm6036a4w](#)) United States, 2011. MMWR 2011; 60 (36):1248-51

<sup>3</sup>Risk of Vertebrobasilar Stroke and Chiropractic Care, Cassidy, SPINE, Volume 13, number 45, pp. 5176-5183.