Summary statement - It is the position of Palmer Chiropractic that the vast majority of scientific evidence shows that a patient who receives a specific chiropractic adjustment has a minimal risk of vertebrobasilar stroke. Note: The term vertebrobasilar refers to the anatomical region where the arteries from the neck meet and form the main artery at the base of the brain.

- The incidence of adverse events (stroke) attributed to adjustments is rare.
- There is an apparent lack of accuracy in publication and/or reporting of “spinal manipulative therapy (SMT)” related accidents.
- Chiropractic is one of the safest forms of health care.

1. **THE INCIDENCE OF ADVERSE EVENTS (STROKE) ATTRIBUTED TO ADJUSTMENTS IS RARE.**

Annually in the United States there are 750,000 strokes (1). The approximate population of the United States is 287 million (2). This shows the incidence of stroke to be one in 383 people annually. The most commonly quoted statistic on the incidence of stroke due to manipulation is 1 in 1 million (3).

This would make stroke related to manipulation 0.038 percent of all strokes occurring annually in the United States. A Canadian study puts the risk of stroke following neck adjustment at 1 in every 5.85 million adjustments (4).

At the present time all of the figures utilized concerning stroke following “manipulation” involve estimates. Additionally, none of the studies adequately control for other risk factors and co-morbidities (related deaths). Furthermore, Leboeuf-Yde et al. has suggested there may be an over-reporting of manipulation-related injuries. These authors cite six catastrophic events that occurred in individuals who were “considering chiropractic care,” yet who did not receive it (5). If these individuals had received chiropractic care, the stroke may have inappropriately been attributed to the chiropractic care.

Millions of adjustments have been given at the Palmer College of Chiropractic clinics since 1907. Only one claim of stroke has been filed and that case was dismissed with no adverse findings against Palmer.

2. **THERE IS A LACK OF ACCURACY IN PUBLICATION AND/OR REPORTING OF “SPINAL MANIPULATIVE THERAPY (SMT)” RELATED ACCIDENTS.**
Unfortunately, medical authors, respected medical journals and medical organizations have erroneously utilized the words chiropractic and chiropractor in documents dealing with SMT injury where no chiropractor was involved in any of the cases (6).

In many cases, misinformation about chiropractic involvement in vertebrobasilar accidents related to “spinal manipulative therapy” (SMT) was not accidental as the authors had access to original reports that identified the practitioner to be other than a chiropractor. Terrett observed that manipulations administered by medical practitioners, medical specialists, osteopaths, physiotherapists, naturopaths, the patient, a kung fu practitioner, a blind masseur, a wife and a barber were all incorrectly attributed to chiropractors (7).

It is the position of Palmer College of Chiropractic that spinal adjustment and spinal manipulation are not synonymous terms (8). Spinal adjustment is distinctly a chiropractic procedure whereas spinal manipulation (SMT) may be performed by anyone including those without formal training.

3. CHIROPRACTIC IS ONE OF THE SAFEST FORMS OF HEALTH CARE.

When compared to the number of illnesses and deaths that will occur this year from the appropriate use of prescription and over-the-counter drugs, the number of serious complications from chiropractic is extremely low. A study in the *Journal of the American Medical Association* found that more than 2 million Americans become seriously ill every year from reactions to correctly prescribed drugs, and 106,000 die from these reactions (9). Another interesting comparison is the incidence of complications from cervical spine surgery, which is 15.6 incidents of neurologic complication per 1,000 surgeries and 6.9 deaths per 1,000 surgeries (10).

This is equivalent to 15,600 incidents of neurologic complication per 1 million surgeries and 6,900 deaths per 1 million surgeries. The most commonly quoted statistic on the incidence of stroke due to manipulation is 1 in 1 million (3); thus the incidence of stroke due to manipulation is far less than the incidence of stroke due to surgical complications.

REFERENCES

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