

## How Dangerous Is Cervical Adjusting?

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Two years ago I attended a lecture by a medical doctor discussing ergonomics. After about an hour of pertinent material he drifted into the subject of treatment for back injuries. I noted with pleasure that he actually said that a chiropractor can really help a lot of back-injured claimants. He got my attention when he said, "But don't let the chiropractor work on your neck; it can cause a stroke." Wow!

At the close of his discussion I asked where he got the opinion that chiropractic adjustments to the neck can be so dangerous. He cited a study I did not know. I disagreed with him, indicating that I know hundreds of chiropractors who have treated thousands of patients over the past 30 years and none of them have ever had a lawsuit for anything. If there was such a problem with chiropractic treatment, it would be quite obvious to the chiropractors. That at least calmed the audience, but not me. Was I missing something?

I had been aware of literature discussing the problem and appreciated that such an accident could indeed occur. However, I knew it could not be frequent. Of the hundreds of DCs I have known over the past 31 years, none have had such an experience. Given this, I assumed that such an accident might happen if someone used unreasonable force or a poor choice of technique in adjusting the cervical spine. Nothing I have learned about the problem has caused me to change that opinion. Regardless, I think every DC should be interested in what follows:

Numerous articles in the chiropractic literature dealing with vascular injury resulting from chiropractic manipulation have put the fear of God into many of us. The truth is that there are a very few cases. In 1980 Jaskoviak<sup>1</sup> reported on 29 published reports involving 46 cases of complications arising from manipulation of the cervical spine, between 1947 and 1987, a span of 40 years. Terrett<sup>2</sup> in 1990, discusses 113 documented cases of vertebrobasilar accidents following spinal manipulative therapy, from 1934 to 1987, a period of 53 years. Judging by the references to his article, it appears that Terrett has done literature searches in many countries, if not the entire world. Of the cases he discovered, 66 were chiropractic, 18 medical, 9 osteopathic, and 2 physiotherapist experiences. A remaining 13 cases were divided between "wife," "self," and "unknown."

Let's look at these statistics a bit harder. There were 66 chiropractic cases in the 53 years from 1934 to 1987. That's just a little over one incident per year. Let's compensate for the increase in our numbers over the past 25 years and take a position, for argument's sake, that 4 such accidents occur per year, instead of a little over one case per year that literature reveals. There are currently some 55,000 chiropractors in practice. Surveys state that the average DC sees 100 patients per week. That works out to some 5,500,000 adjustments per week given by chiropractors. That number of adjustments multiplied by 52 weeks in a year comes out to 286 million adjustments delivered per year. Four cases out of 286 million adjustments is not what we would call high exposure. That's one incident in 71,500,000 adjustments. The average chiropractor seeing 100 patient visits per week for 40 years will give a total of 208,000 adjustments in his entire career! It would take 340, 40-year-careers in chiropractic for one such incident to occur. If there are 4 cases

out of 286 million adjustments, one would have to conclude the exposure is slim indeed.

Let's remember also that during that same 53-year period, 29 patients had the same experience at the hands of MDs, osteopaths, and physiotherapists.

Regardless, the problem exists and deserves attention. If the patient complains of vertigo, dizziness or light-headedness, determine exactly when such symptoms come on. Did they arise insidiously or after injury? Are they only present or brought on by certain head positions? Are they worsening or improving? If the patients state that they get dizzy each time they turn their head to the left, do not turn their head to the left during examination or treatment. If they get dizzy on lying supine, do not examine or give adjustments in the supine position.

Terrett<sup>2</sup> lists several signs and symptoms of vertebrobasilar ischemia:

Dizziness (vertigo, light-headedness)

Drop attacks

Diplopia

Dysarthria

Dysphagia

Ataxia of gait

Nausea with possible vomiting

Nystagmus and/or numbness

Seeing these symptoms should alert one to the potential of brainstem ischemia. Additional care must be taken with these patients. While some examination procedures may inadvertently produce dizziness, one should not purposely set out to reproduce the symptom simply to be satisfied of its presence. Take the patient's word for the time being at least.

The presence of any of these symptoms does not preclude chiropractic adjustments to the cervical spine. However, they should alert us to the possibility of vascular involvement. Accordingly, we should proceed with great caution simply because of the symptomatology.

Chiropractic clinical experience is that most dizziness, vertigo, or light-headedness responds to reasonable, low-force chiropractic measures. This must mean that such symptoms more often come about because of chiropractic subluxations with no vascular component. These subluxations can bring about dysfunction of the cervical mechanoreceptors (joint capsule stretch receptors) secondary to cervical spinal joint dysfunction.<sup>3</sup> This is not an uncommon finding.

### *References*

1. Jaskoviak, P. "Complications arising from manipulation of the cervical spine." JMPT December 1980; 3(4).
2. Terrett, A. "It is more important to know when not to adjust." Chiropractic Technic February 1990; 2(1).

3. Gerhart, T. "Role of cervical joint dysfunction in balance and coordination." Success Express 1984; Spring.

For additional information on treating these patients, please contact the author at 1406 South Main Street, Medina, New York 14103. I would appreciate your comments and/or a brief discussion of your personal/clinical experience on this subject.

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