

### **Cerebral vascular accidents: a report on the occurrences and the incidence in a 5 year period in Canada**

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It has been reported in an article published in the JCCA<sup>1</sup> that there were 13 known CVA's in Canada in the 5 year period between January 1986 and December 1990. Twelve of these occurrences were covered by the CCPA which is the major provider of protection for chiropractic liability occurrences in Canada.

It was established in this prior article that a more accurate incident rate for CVA's in chiropractic practice is really about one occurrence in every 3 million to 3.8 million manipulations performed.

This paper will report on the chiropractors and the patients involved in the 12 cases covered by the CCPA in this period of time. We know that, of the 12 occurrences, 10 of the chiropractors were male, 2 were female. Nine of the chiropractors were under the age of 40, 3 were over the age of 40. Of the patients involved in these occurrences, we know that 4 were male, 8 were female. Of the 8 females, 7 were in the age group between 32 and 37, and 1 was 53. The males covered a greater range of age, the youngest being 11, and the others being 24, 45, and 64. Of the females we know that 5 were not on the birth control pill. We do not know about the other 3. Of the 12, we definitely know that 6 did not smoke, and 1 was a smoker. Only 2 had reported any prior incidence of strokes or stroke like occurrences in their family. Four cases are unknown, the rest had no history of strokes in the family or in their own history.

In all twelve cases of CVA's handled by us, there were no x-rays taken by the chiropractors prior to manipulation.

We know that 9 of the claimants had been a recipient of some prior chiropractic care with two of them receiving regular chiropractic care. In 7 of the 12 cases, the alleged CVA occurred on the first manipulation of the presenting problem. For the 3 people who had not had prior chiropractic care and presented with a problem, the CVA occurred in 1 case on the fourth treatment and 1 on the second treatment and 1 on the initial treatment.

Of the people who were alleged to have sustained a CVA, 7 had received more than one manipulation at the time the CVA occurred. In fact, some chiropractors had persisted in manipu-



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lating well after the onset of symptoms. Five of the people had received only one adjustment at the occurrence. In six of the cases, the symptoms started immediately. Of these, in five of them it was accompanied by nausea and vomiting and in one vomiting only.

In four of the occurrences the symptoms occurred within 12 hours of the adjustments; one occurred one day later and one was alleged to have occurred two days later. It is interesting to note that, in the occurrence involving the 11 year old boy, it was alleged to have occurred 2 days after the manipulation and in the oldest patient, which was a male of 64, the symptoms were alleged to have occurred 1-day post manipulation.

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Both these cases were resolved uneventfully with no residual symptoms.

What then were the nature of the injuries or what occurred as a result of the alleged incidents? In four of the CVA's the primary nature of the residual injury appeared to be emotional or psychological problems. These were primarily personality changes where the occurrence caused a true emotional distress to the patient. The patient's personality underwent subsequent psychological change, sometimes becoming fearful or fixated on the occurrence and, in several of these cases, the patients were unable to work for months or even years afterwards, because of this emotional upset.

Four of the cases were resolved uneventfully, no residual symptoms or problems at all were evident. In the other cases, there were a variety of symptoms that occurred. In one there was true apparent neurological damage with partial disability observed in the right arm and some permanent speech impediment present. In another there were some visual disturbances with the ongoing restricted use in one arm. In the third case, there was full and complete paralysis. The patient was left permanently disabled – truly a disaster and, by far the worst of the occurrences. In this occurrence as well, the symptoms had occurred within a twelve hour period post manipulation. In the twelfth and final case there was again some minor permanent loss of one arm, weakness and inability to have full control as well as significant emotional overlay of the problems.

It is interesting to note that the one case not covered by the

CCPA in this period of time, but of which we have fairly good knowledge, tended to follow a similar pattern to the cases that have been reported here. The alleged occurrence involved a female, mid 30's, who appeared to have, again, sustained primarily temporary trauma (no complete or partial paralysis), primarily an emotional type of occurrence leaving the patient unable to work for a period of time. This case, to the best of our knowledge, did not involve x-rays and has not been resolved at this time.

It is the hope of myself and the CCPA that, in presenting this information, a greater understanding and appreciation of the incidence of CVA's, both within the profession and outside, can be gained. It is our sincere hope that this knowledge will bring a better understanding of what is truly one of the worst things that can happen in chiropractic practice. It is also a subject which we believe has been vastly over reported and over stated on the part of the medical profession and used as a weapon against chiropractors and chiropractic practice. As the material clearly indicates, this problem is not nearly as common or as severe as it has been stated by some of our critics, and there is no doubt, that whilst the occurrences are real, they are not as frequent or as common as similar incidents involved in many medical procedures.

#### References

- 1 Carey P. A report on the occurrence of cerebral vascular accidents in chiropractic practice. JCCA 1993; 37(2):104-106.

