

www.publications.parliament.uk/pa/ld199900/ldselect/ldsctech/121/12109.htm#a78 (accessed 2001 Nov 19).

5. Here is what you need to know to reduce your risk of thrombosis injury. Available: [www.airhealth.org/ENGLISH.PDF](http://www.airhealth.org/ENGLISH.PDF) (accessed 2001 Nov 19).
6. Pre-flight essentials: your health inflight. Available: [www.qantas.com.au/flights/essentials/healthinflight.html](http://www.qantas.com.au/flights/essentials/healthinflight.html) (accessed 2001 Nov 19).

## Clarifying chiropractic manipulation risks

I read with great interest the commentary by Moira Kapral and Susan Bondy<sup>1</sup> on the elegant study by Scott Haldeman and colleagues<sup>2</sup> estimating the risk of vertebral artery dissections following chiropractic manipulation. Kapral and Bondy succinctly summarized some of the main difficulties that investigators face in attempting to determine the true risk of vertebrobasilar

accidents (VBA) following cervical manipulation.

However, I was surprised that Kapral and Bondy claimed that the population-based case-control study from Ontario estimating the risk of stroke from chiropractic manipulation<sup>3</sup> “placed the risk of stroke for individuals aged under 45 years at about 1.3 per 100 000 chiropractic visits.” In fact, careful reading of this article demonstrates that it actually stated that “for every 100 000 persons aged < 45 receiving chiropractic, approximately 1.3 cases of VBA attributable to chiropractic would be observed.”

Each chiropractic patient frequently receives a series of visits, and thus it is essential to clearly differentiate between the number of chiropractic patients and the number of chiropractic visits. Careful discrimination between these concepts is especially crucial in this discussion, because the study by Haldeman and colleagues estimates the incidence

of stroke following a chiropractic treatment at 1 per 8.06 million chiropractic office visits and 1 per 5.85 million cervical treatments and because Kapral and Bondy seem to imply that these figures are significant underestimates.

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### References

1. Kapral MK, Bondy SJ. Cervical manipulation and risk of stroke. *CMAJ* 2001;165(7):907-8.
2. Haldeman S, Carey P, Townsend M, Papadopoulos C. Arterial dissections following cervical manipulation: the chiropractic experience. *CMAJ* 2001;165(7):905-6.
3. Rothwell DM, Bondy SJ, Williams JL. Chiropractic manipulation and stroke: a population-based case-control study. *Stroke* 2001;32:1054-60.

## Corrections

The commentary by Moira Kapral and Susan Bondy concerning cervical manipulation and risk of stroke contains an error.<sup>1</sup> In the fourth paragraph, the sentence that begins “This placed the risk of stroke for individuals aged under 45 years at about 1.3 per 100 000 chiropractic visits ...” should instead begin as follows: “This placed the risk of stroke for individuals aged under 45 years at about 1.3 per 100 000 people who had had one or more chiropractic visits in the previous week ...”

### Reference

1. Kapral MK, Bondy SJ. Cervical manipulation and risk of stroke. *CMAJ* 2001;165(7):907-8.

In a recent *CMAJ* article by Serge Gauthier,<sup>1</sup> in the first paragraph under the heading “Management of Alzheimer’s disease” (page 618), reference 11 should appear 3 lines below its current location, after the phrase “at home.” Also, in Table 3 of the same article the protein binding of galantamine should read 18%.

### Reference

1. Gauthier S. Advances in the pharmacotherapy of Alzheimer’s disease [review]. *CMAJ* 2002;166(5):616-23.

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