

Naimark Report commissioned by the hospital and its documentary base. We also had access to key Apotex and hospital documents not available to the Naimark Review. We therefore believe we had a comprehensive set, from both sides, of relevant information regarding all players in the dispute. The central conclusions of our report were independently corroborated by the Dec. 19, 2001, report issued by the College of Physicians and Surgeons of Ontario,⁵ who had the participation of some of those very individuals who declined to participate in our inquiry.

We would encourage your readers to read our report, along with the supplement discussing events since October 2001; both can be accessed at www.dal.ca/committeeforinquiry. Contrary to the suggestion in your editorial, the rights of "the study subject who volunteers in research" are judged to be a centrally important issue in our report; indeed, they drive the wide-ranging recommendations that we hope will be taken up by all of those responsible for the well-being of research participants in Canada.

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Alzheimer's disease and herpes

Herpes simplex virus type 1 (HSV1) is present in latent form in the brains of a high proportion of elderly people¹ and is a risk factor for Alzheimer's disease in carriers of the type-4 allele of the apolipoprotein E gene (apoE-e4). ApoE-e4 is also a risk factor for cold sores.^{2,3} We have suggested that when HSV1 is reactivated in the nervous system the resulting damage is greater in apoE-e4 carriers than in people who carry the other apoE alleles. We recently detected antibodies to HSV1 in cerebrospinal fluid, substantiating our detection of HSV1 by polymerase chain reaction and showing that it does indeed reactivate (unpublished data). A clinical trial testing a synthetic amyloid peptide as immunotherapy for Alzheimer's disease was recently halted because 4 patients developed inflammation of the brain; in "some" of these 4 patients, a virus was detected in the cerebrospinal fluid.⁴

The results of René Verreault and colleagues⁵ raise the intriguing possibility that viruses other than HSV1 may directly influence Alzheimer's disease. Nonetheless, their findings could equally well be explained by an indirect effect: HSV1 reactivation can be triggered by inflammation, and vaccines would presumably prevent inflammation by preventing infection with the target virus, thus indirectly preventing HSV1 reactivation. Their study also supports the possibility that vaccination against HSV1 itself might prevent Alzheimer's disease; such vaccination is feasible now that the age at which primary infection occurs is rising. In fact, we have shown that vaccination of HSV1-infected mice with mixed HSV1 glycoproteins prevents establishment of latency in the brain.⁶

Finally, it would be interesting to know if the trend detected by Verreault and colleagues is dependent on the

apoE-genotype. Such dependence has also been found for patients with herpes simplex encephalitis⁷ and for subjects infected with HIV but who have not yet developed AIDS.⁸

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Spinal manipulation versus mobilization

The commentary by Edzard Ernst¹ alerts health professionals to the possible complications of cervical manipulation. However, we feel that the commentary would have been even more clinically relevant if it had emphasized to physicians the distinction between spinal manipulation techniques and mobilization techniques. Manipulation is defined as a small-amplitude, high-velocity thrust tech-