Multiple sclerosis and mercury

To the Editor: In the article of Balcer (March 23 issue)⁽¹⁾ the clinical problem and treatment of optic neuritis was described. We wondered not to read about the potential role of environmental factors. Since metals are known to be potent inducers of autoimmune diseases, one should look to the kind of metals men are exposed to. For example, some epidemics of multiple sclerosis occurred after acute exposure to mercury vapor or lead.⁽²⁾ Inorganic mercury leads also to apoptosis in oligodendrocytes.⁽³⁾ Already in 1966, Baasch⁽⁴⁾ described a correlation between the prevalence of multiple sclerosis and the number of dental amalgam fillings, one source of human mercury exposure. It was also published recently that over 70% of patients with autoimmune diseases, including multiple sclerosis, recovered after removal of dental amalgam.⁽⁵⁾ These results seem to be more promising than the presented with methylprednisolone and Interferon beta, drugs with potential more adverse effects. Further studies to confirm or reject the role of mercury and the efficiency of heavy metal removal as a possible causal treatment of multiple sclerosis should be performed.

- (1) Balcer LJ. Optic neurotis. N Engl J Med 2006;354:1273-80.
- (2) Ingalls TH. Endemic clustering of multiple sclerosis in time and place, 1934-1984. Confirmation of a hypothesis. Am J Forensic Med Pathol 1986;7:3-8.
- (3) Issa Y, Watts DC, Duxbury AJ, Brunton PA, Watson MB, Waters CM. Mercuric chloride: toxicity and apoptosis in a human oligodendroglial cell line MO3.13. Biomaterials 2003;24:981-7.
- (4) Baasch E. Theoretical considerations on the etiology of multiple sclerosis. Is multiple sclerosis a mercury allergy? Schweiz Arch Neurol Neurochir Psychiatr 1966;98:1-19.
- (5) Prochazkova J, Sterzl I, Kucerova H, Bartova J, Stejskal VD. The beneficial effect of amalgam replacement on health in patients with autoimmunity. Neuro Endocrinol Lett 2004;25:211-8.