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Response from the authors

Dear Sir,

We are most interested in the comments of Dr. L. O. Simpson regarding the importance of intracapillary blood constituents and endothelial cells in the damaging effects of capillary disease in diabetic nerve. We would agree with the opinion that this is probably just as important as the abnormal haemodynamics in the vessels supplying the nerve. In the original studies of sural nerve biopsies where capillary endothelial changes were noted [1–3] many of the vessels showed debris which was undoubtedly of cellular nature with fibrin and in some instances small plugs of deactivated platelets. However, we would agree that the haemodynamic factors within the nerve are extremely difficult to assess in vivo. We would suggest that there is an urgent need for relatively non-invasive methods of measuring nerve blood flow, perhaps as simple as nerve oxygen tension to study the varying effects of the metabolic state and the influence of drugs known to affect nerve blood flow in animals.

Yours sincerely,

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The cumulative incidence of childhood diabetes mellitus in Sweden unaffected by BCG-vaccination

Dear Sir,

Several studies in the diabetes-prone nonobese diabetic (NOD) mouse have shown that even one single injection of either complete Freund's adjuvant (CFA) [1] or BCG-vaccine [2] given at an early age prevented the development of diabetes in this animal model. The mechanism has been indicated to be due to a non-specific stimulation of natural suppressor activity. Recently, Shehadeh et al. [3] reported that CFA and BCG vaccine modulated the development of diabetes mellitus in NOD mice. Furthermore in an open clinical trial in 17 newly-diagnosed insulin-dependent diabetes mellitus (IDDM) patients intracutaneous administration of 0.1 ml BCG-vaccine (1 mg/ml) led to a clinical remission more frequently when compared to non-treated control subjects. Based on these indications several large-scale placebo-controlled trials have been started in diabetic humans including children with primary prevention in healthy children as a goal.

In Sweden, since 1 July 1977 we have continuously registered all childhood-onset diabetic cases with a level of ascertainment close to 99 % [4]. Before 1975 all newborn babies in Sweden were offered BCG-vaccination (using the dose given above) in the first month of life and the coverage of this vaccination programme was almost complete [5, 6]. Due to side effects, in some cases severe complications, this policy was stopped on 1 April 1975. Since then only high-risk groups such as immigrant children or children with a close relative with tuberculosis have been vaccinated. In 1976 only 0.6 % were vaccinated [5] and between 1976–1980 less than 2 % were vacci-

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