Multifocal motor neuropathy: and then, 20 years later …

Multifocal motor neuropathy (MMN) is a rare disorder of the peripheral nerve, typically characterised by progressive muscle weakness and spontaneous activity of motor units (fasciculations and myokymia) that usually initially affect the distal upper or sometimes lower extremities. This syndrome was recognised by a group of Swiss neurologists-neurophysiologists who published their observations in 1986 [1]. This paper provided a comprehensive description of the clinical and electrophysiological manifestations of the disorder, including that of the hallmark of the neuropathy – the persistent conduction block of the peripheral motor nerve fibres.

Subsequently, the dysimmune origin of multifocal motor neuropathy, suspected by Roth et al. [1] in their princeps paper, received further support with the observation that anti-ganglioside GM1 antibodies could be highly elevated and that the syndrome could benefit from immunomodulating treatments. Recent studies have shown that, in multifocal motor neuropathy, conduction block can be explained by axonal membrane depolarisation and hyperpolarisation phenomena in addition to focal demyelination.

Twenty years later, several questions remain. They concern (i) the anti-GM1 antibodies that are not considered pathognomonic of the disorder because of their poor sensitivity and specificity, (ii) the prevalence of multifocal motor neuropathy, and particularly the form disclosing no overt conduction block, (iii) the possibility of a pure axonal form of multifocal motor neuropathy, and (iv) the best conduct of the treatment.

We have held a symposium dedicated to multifocal motor neuropathy during the 16th meeting of the European Neurological Society on May 29, 2006, in Lausanne. This symposium celebrated the 20th anniversary of the recognition of the disorder and addressed the practical and theoretical issues of this enigmatic neuropathy. The audience was so large (more than 500 neurologists) that part of it had to follow the conferences in an adjoining room hastily arranged by the organisers.

In this issue of the Swiss Archives of Neurology and Psychiatry, *Andreas J. Steck, one of the editors, gives us the opportunity to publish the texts of the seven conferences held during the symposium.*

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Reference

1 Roth G, Rohr J, Magistris MR, Ochsner F. Motor neuropathy with proximal multifocal persistent conduction block, fasciculations and myokymia. Evolution to tetraplegia. Eur Neurol. 1986;25:416–23.