General Scientific Session on Neuroimmunology III/ Peripheral Nerve Morning Meeting Saturday, May 2, 1981

9:00 A.M.-12:00 Noon
Ballroom Center

Chairman: Barry G.W. Arnason, Chicago, IL
Secretary: David E. Pleasure, Philadelphia, PA

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JERRY W. NORTHINGTON and MARK J. BROWN, Philadelphia, PA

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Cross-Reactive Antibodies to Influenza Vaccine and Peripheral Nerve in Guillain-Barré Syndrome (GBS)

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Polyinosinic-Polycytidylic Acid Poly-L-lysine (Poly-ICLC): A New Anti-Dysimmune Effect Remarkably Beneficial in Neuropathies

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24 hours hyperinterferonemia. The beneficial effect of Poly-ICLC is unlikely to be simply glucocorticoid because responsive patients had severe prednisone side effects at the beginning of treatment, which dissipated as prednisone was withdrawn.

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The Prevalence of Monoclonal Gammopathy in Peripheral Neuropathy: A Prospective Survey

JOHN J. KELLY, Jr, R.A. KYLE, P.C. O'BRIEN, and P.J. DYCK, Rochester, MN

To assess the prevalence of monoclonal gammopathy in peripheral neuropathy, we attempted to perform serum protein electrophoresis in all 692 patients diagnosed as having a peripheral neuropathy over a 1-year period. About 80% of the entire group had a serum protein electrophoresis performed. Three hundred thirty four of the 692 patients (48%) proved to have a neuropathy not due to a systemic disease and not inherited. In this "idiopathic" group, there was a 10% prevalence of monoclonal gammopathy. Among the patients with a monoclonal gammopathy, further investigation showed that 8 patients had 1° systemic amyloidosis, 3 patients had multiple myeloma, 1 had Waldenstrom macroglobulinemia, 1 had gamma-heavy chain disease, and 15 had a monoclonal gammopathy of undetermined significance. This 10% prevalence rate was significantly higher than corresponding rates reported for the general population. The increase was statistically significant at the $p < 0.025$ level in each decade from 50-80 years of age, but not for patients 80+. We conjecture that the lack of statistical significance in older patients may be due at least in part to smaller sample size in the 80+ group.

The result suggests that: (1) Serum protein electrophoresis should be obtained in all patients with peripheral neuropathy of unknown cause, and (2) a disturbance of the immune system probably plays a role in some cases of peripheral neuropathy associated with a monoclonal protein.

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Peripheral Neuropathy and Plasma-Cell Dyscrasia: The Range of Pathologic Findings in Sural Nerve

R. NEMNI, Boston, MA, and G. GALASSI, N. LATOV, W.H. SHERMAN, M.R. OLARTE, and A.P. HAYS, New York, NY

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Immunocytochemical Staining of Peripheral Nerve with Serum from Patients with Polyneuropathy and Paraproteinemia

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