Multiple Sclerosis and Other Autoimmune Diseases

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Introduction: Multiple sclerosis is a demyelinating disease affecting the central nervous system with an unknown origin. The immune system plays a crucial role in its pathogenesis. Various previous studies have supported the concurrence of autoimmune diseases in genetically susceptible populations. Coexistence of other autoimmune disorders with MS supports the autoimmune hypothesis.

Objectives: To look for co-occurrence of autoimmune diseases including thyroid disease, diabetes, lupus, Sjögren's syndrome and rheumatoid arthritis in our patient population with MS.

Methods: We selected 400 patients with MS by a retrospective chart analysis. Patients previously tested for serum glucose, thyroid function tests, ANA, anti- DNA, SSA, SSB, ESR, RF, cANCA or pANCA were included. Patients with myasthenia gravis, steroid induced diabetes or hypothyroidism due to interferons were excluded from the study.

Results: 84.3% of patients were female and 15.8% were male. 82.8% had RRMS, 16.3% had SPMS, 0.8% had PPMS and 0.3% had PRMS. Serum glucose was abnormal in 19.8%, ANA elevated over 1:80 in 19.7%, ESR abnormal in 18.5%, antiDNA in 13.8%, hypothyroidism in 13.7%, hyperthyroidism in 4.8%, RF positive in 4.3% and SSA positive in 2.7% that were screened for the conditions.

Conclusion: Association of autoimmune responses appears to be present in some MS patients. Whether this represents an asymptomatic epiphenomenon deserves further studies.