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Sympathetic nervous system and neurotransmitters: Their possible role in neuroimmunomodulation of multiple sclerosis and some other autoimmune diseases

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Abstract

Multiple sclerosis is still a disease without a cure. Although intensive research efforts have led to the development of drugs that modify the activity of the disease, most of them have various side effects and are expensive. At the same time it is becoming apparent that some remedies usually used to treat somatic and psychic disorders also have immunomodulating properties, and may help manage multiple sclerosis and other autoimmune diseases. We describe here the role of the sympathetic nervous system in the neuro-immune interaction in multiple sclerosis and other immune diseases with increased cellular immunity as well as neurochemical disturbances that take place in these disorders. © Versita Warsaw and Springer-Verlag Berlin Heidelberg 2006.

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Keywords

Adrenoreceptor, Autoimmune disease, Multiple sclerosis, Neuroimmunomodulation, Neurotransmitter, Sympathetic nervous system