

EXPERIMENTAL ALLERGIC ENCEPHALOMYELITIS IN ADULT RATS AFTER ADMINISTRATION OF INTERLEUKIN-1 β DURING DIFFERENT PERIODS OF EARLY LIFE

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Multiple sclerosis is a chronic disease of the CNS that affects people of working age, in which the targets of aggressive immune cells become the myelin and myeline producing cells, as well as neurons. It is assumed that a predisposition to MS is forming in childhood, due to common infections. In this paper the experimental allergic encephalomyelitis (EAE) was examined in rats administered IL-1 β at different periods of the early postnatal ontogenesis. EAE was induced in rats at the age of 3 months by single subcutaneous immunization with a homologous homogenate of spinal cord in complete Freund's adjuvant. The number of sick animals were evaluated, as well as the severity of the disease and its duration. It was shown that in rats after administration of IL-1 β on 1st and on 4th week of life EAE is more severe than corresponding control groups of rats. Discusses the damaging or protective effects of injections of IL-1 β during different periods of early postnatal ontogenesis, role of stress reactivity and communication with the «hygiene hypothesis».

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