

The Blood-Brain Barrier and Immune System Dysfunction in Neuroinflammatory Diseases

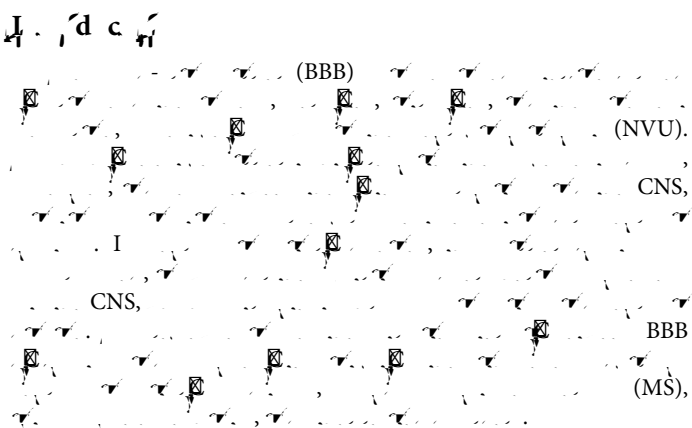
John D*

Department of Neuroimmunology, Harvard Medical School, Boston, USA

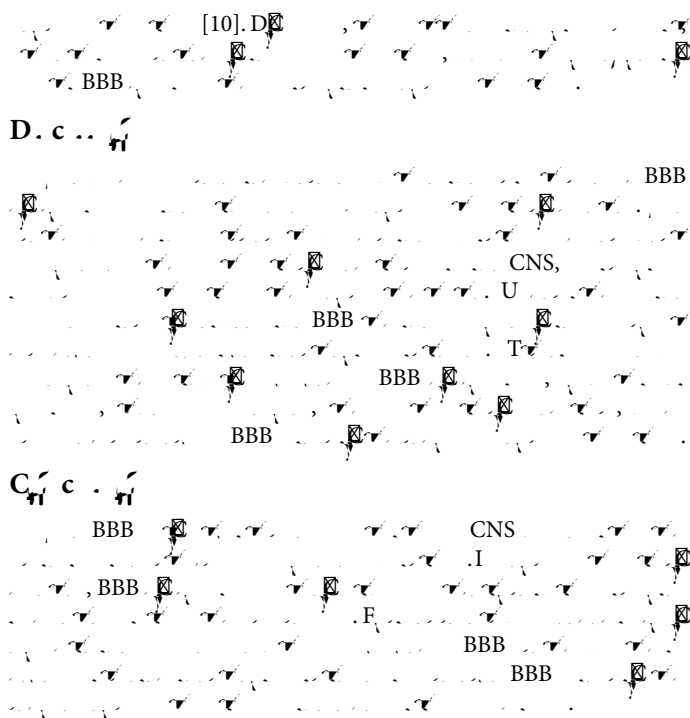
Abstract

Neuroinflammatory diseases, encompassing a diverse group of conditions affecting the central nervous system (CNS), are characterized by immune cell infiltration and inflammation within the brain and spinal cord. A critical factor in this process is the blood-brain barrier (BBB), a highly selective barrier that regulates the passage of molecules and cells between the bloodstream and the CNS. This review examines the intricate relationship between BBB dysfunction and immune system activity in the pathogenesis of various neuroinflammatory diseases, highlighting the mechanisms involved and their therapeutic implications.

Keywords: Blood-brain barrier; Neuroinflammation; Immune system; Multiple sclerosis; Alzheimer's disease; Parkinson's disease; Amyotrophic lateral sclerosis; Neurodegeneration; T cells; Inflammation



References:
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