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Potential Roles of Brain Barrier Dysfunctions in the Early Stage of Alzheimer's Disease

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Highlights

- Described the basic structure of brain barrier.
- Collected the relationship between transport protein in the brain barrier and AD.
- Summarized the cytokines and inflammasomesassociated with brain barrier.
- Proposedthe potential role of brain barrier in the early stage of AD.

Abstract

Though Alzheimer's disease (AD) has been studied for more than a century, to date, no drug has provided a definitive cure. The slow development of the disease and the time lag between pathological changes and the appearance of symptoms make AD difficult to diagnose and result in a missed window of opportunity for effective treatment. Currently, there is still no effective treatment for the late stage of AD, though delayed onset or attenuation of symptoms is possible in the early stages of the disease. The brain barrier is composed of the blood-brain barrier and blood-CSF