Review Article

Apoptosis in neurodegenerative diseases

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Abstract

Neurodegenerative diseases cause a range of neurological disorders in the central nervous system. Todays researchers emphasize the pivotal role of apoptosis in neurodegenerative diseases. Given that injured central nervous system has limited regenerative capacity, it is of extreme importance to limit the damage by inhibition of neuronal death. During the past decade, considerable progress has been made in understanding the process of apoptosis at molecular level. Also, according to the understanding of the mechanisms of apoptosis, several studies have examined the possible effects of neuroprotective compounds for reducing or inhibiting neuronal apoptosis. In this review article, it has been attempt to review the role of apoptosis in the pathology of neurodegenerative diseases. Also, an overview has been made in the field of neuronal apoptosis inhibitor with neuroprotective compounds in human and experimental models of neurodegenerative diseases.

Keywords: Neurodegenerative diseases, Apoptosis, Anti-apoptotic compounds

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