Abstract

An important line of investigation focuses on the selective vulnerability of neuronal populations in degenerative disorders. Alzheimer disease is one such disorder and features early, consistent losses in a number of neuronal nuclei, including those harboring cholinergic neurons in the basal forebrain. We will review the evolution of ideas as to the cellular and molecular bases for loss of these neurons and review recent studies pointing to a critical role for endosomal dysfunction and compromised axonal transport of neurotrophic factor signaling. Our discussion will highlight insights from the genetics of Alzheimer disease and the contributions to be made by studies in adults with Down syndrome.


