

Invasive and non-invasive therapies for Neurological disorders: Relevance to memory loss and locomotor inabilities

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Abstract:

Advancements in medical science have facilitated the life span extension among humans. The increased life expectancy, though, has come at a cost. The cases of an aging population suffering from degenerative diseases like Alzheimers disease (AD) and Parkinsons Disease (PD) are presently at its all-time high. Disorders such as AD and PD are triggered by an abnormal transition of soluble proteins into their highly ordered aggregated forms, amyloidosis and synuclein aggregates. The landscape of neurodegenerative disorder treatment remains unchanged, and there is no cure for such disorders. However, an increased understanding of the underlying physiological mechanism has given hope for a possible therapeutic solution.

The mechanism by which disease develops and progresses will be briefly discussed (Pathophysiology). The current state of molecular and non-molecular options for therapeutic intervention of amyloidosis will be discussed. The efficacy of non-invasive physical therapies such as magnetism, physical exercise, electric field, light therapy, music therapy, as possible alternatives to their molecular counterparts will be highlighted.

