

Is PD a prion disease? yes

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Parkinson's disease is characterized by the presence of Lewy Bodies that are intraneuronal proteinaceous cytoplasmic inclusions and by severe neuronal losses in several brain regions associated with deposits of aggregated proteins. α -Synuclein has been identified as a major protein component of Lewy Bodies and heavily implicated in the pathogenesis of Parkinson's disease. In the past few years, evidence has emerged to explain how this aggregate-prone protein can undergo spontaneous self-aggregation, propagate from cell to cell, and mediate neurotoxicity. Current research now indicates that oligomeric forms are probably the toxic species. Such peculiar behaviour of misfolded oligomeric α -Synuclein has led to the proposal that it might actually behave as a prion. The speaker will review some of the data in favour of such hypothesis without neglecting alternate explanations.