ARE THE TAUOPATHIES A SPECTRUM OR DISTINCT DISEASES: A SPECTRUM

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Tauopathies comprise a broad group of neurodegenerative diseases containing filamentous deposits of phospho-tau protein in the brain. Clinically, tauopathies may manifest dementia and/or movement disorders. Tauopathies can be sporadic or familial and are categorized according to the distribution and morphology of the inclusions. In addition, tauopathies may also be grouped based on the predominant tau isoform on the inclusions. For instance, Pick's disease is a tauopathy with rounded neuronal inclusions constituted predominantly of 3-repeat tau. Progressive supranuclear palsy, corticobasal degeneration and argyrophilic grain disease represent 4-repaeat tauopathies, whereas Alzheimer's disease and chronic traumatic encephalopathy show both 3-repeat and 4-repeat. Although each tauopathy has distinctive neuropathological features, they all have commonalities and often cases, elements of different tauopathies can be appreciated in a single case. Such commonalities present in the tauopathies' spectrum are promising targets for development of disease-modifying therapies with the potential to benefit patients across the tauopathies' spectrum, regardless of the clinical presentation.