## ARE MULTI-SYSTEM ATROPHY (MSA)-PARKINSONISM AND MSA-CEREBELLAR THE SAME

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The term MSA was coined in 1969 to encompass three previously distinct neurodegenerative disorders, striatonigral degeneration, olivopontocerebellar ataxia and Shy–Drager syndrome. MSA is characterized clinically by symptoms that can be subdivided into pyramidal, extrapyramidal, cerebellar and autonomic categories. Its clinically course is progressive and variable. The initial symptoms could be extrapyramidal motor abnormalities such as bradykinesia, rigidity and postural instability are classed as either parkinsonian-type (MSA-P). It could start with cerebellar symptoms reflect damage to the cerebellum (MSA-C) due to olivopontocerebellar atrophy. Symptoms could be autonomic in Shy-Drager syndrome. Neuropathological examination often reveals gross abnormalities of the striatonigral and/or olivopontocerebellar systems. Due to the presence of abnormal a-synuclein positive cytoplasmic inclusions in oligodendrocytes, termed glial cytoplasmic inclusions and the convergence of symptoms in end phase the three conditions are considered to be one disease. There are however enough divergence to considered different entities. We will summarize key findings and discusses current areas of debate supporting this hypothesis.