Identification of a pathologically confirmed vascular Parkinsonism disease in a patient diagnosed as idiopathic PD and PDD

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Statement of the Problem: Vascular Parkinsonism (VaP) is defined as Parkinsonism resulting from cerebral vascular disease (CVD), based on the presence with variable motor and non-motor signs that are corroborated by clinical, anatomic or imaging findings of cerebrovascular disease. It is difficult to distinguish from primary neurodegenerative parkinsonism and identify overlapping syndromes with mixed pathologies. Vascular Parkinsonism (VaP) is very cormmon and has been found to be present in about 3–5% in a post-mortem study of patients with Parkinsonism. The frequency of post-stroke movement disorders is likely to be underestimated.

Methodology & Theoretical Orientation: We report a case of an 84-year-old man presented progressive Parkinsonism with prominent postural instability, gait impairment, pseudobulbar, cognitive and urinary symptoms and poor responsiveness to dopaminergic drugs. He has been diagnosed as Parkinson disease (PD) at the baseline and Parkinson Disease Dementia (PDD) at last. The patient's post-mortem study did not conform to PD manifestation with cerebral small vessel disease (CSVD) of multiple lacunar infarction, cerebral microhemorrhage and subcortical white matter lesions. While immunohistochemical staining for α-synuclein showed no antibody accumulation.

Conclusion & Significance: Insidious onset VaP subtype is more frequent, presenting with progressive Parkinsonism with prominent postural instability, gait impairment, corticospinal, pseudobulbar, cerebellar, cognitive and urinary symptoms and tending to be poor responsive to dopaminergic drugs. Misdiagnosis may occur because of asymptomatic CSVD as a pathogenic factor.