00195 Falls in People With Parkinson's Disease

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Aims: Falls are difficult to manage in Parkinson's Disease (PD) and can lead to substantial disability, and healthcare costs. Little is known about falls in PD in Singapore. Such information can help provide clinicians with targets for falls prevention strategies. To investigate the prevalence of falls in PD and their associations with clinical and physical factors, and their contribution to quality of life (QoL).

Methodology: This prospective cross-sectional study utilised baseline data of consecutive idiopathic PD patients seen at the PD Clinic at the Singapore General Hospital from June 2015 to Feb 2017. Each patient was evaluated on their history of falls in the past one year, disease stage, cognition, postural sway, contrast sensitivity, gait speed and PD-QoL. Associations between falls and other continuous variables were analysed using Spearman bivariate correlations. Hierarchical multiple regression was used to analyse the contribution of falls to QoL while controlling for age, gender and disease stage.

Result: 101 patients (67% male, mean age 67.3 years, median Hoehn & Yahr stage=1) were included. 33 (30%) patients reported to have fallen in the past 1 year (n=60 falls, 70% indoor). 60% of falls occurred during walking. The main causes were trips (30%), freezing (28%) and loss of balance (15%). Falls were only significantly associated with self-reported gait freezing (r_s=0.24, p=0.013). The final regression model explained 44% of the variance in QoL ($F(8,78)$=2.6, p=0.017) with gait freezing as the only significant factor (beta=0.4, p= 0.002).

Conclusion: Falls are common in PD, even in patients with early disease. In contrast to European studies, a large proportion of falls occurred indoors, during walking and were due to trips and freezing. Gait freezing was significantly associated with increased baseline falls. Freezing, and not falls, was the only significant factor associated with QoL, highlighting the need to address the impact of freezing in future studies.