Risk factors and predictors of levodopa-induced dyskinesia among multiethnic Malaysians with Parkinson's disease

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Abstract
Chronic pulsatile levodopa therapy for Parkinson's disease (PD) leads to the development of motor fluctuations and dyskinesia. We studied the prevalence and predictors of levodopa-induced dyskinesia among multiethnic Malaysian patients with PD. Methods: This is a cross-sectional study involving 95 patients with PD on uninterrupted levodopa therapy for at least 6 months. The instrument used was the UPDRS questionnaires. The predictors of dyskinesia were determined using multivariate logistic regression analysis. Results: The mean age was 65.6 +/- 8.5 years. The mean onset age was 58.5 +/- 9.8 years. The median disease duration was 6 (7) years. Dyskinesia was present in 44% (n = 42) with median levodopa therapy of 3 years. There were 64.3% Chinese, 31% Malays, and 3.7% Indians and other ethnic groups. Eighty-one percent of patients with dyskinesia had clinical fluctuations. Patients with dyskinesia had lower onset age (p < 0.001), longer duration of levodopa therapy (p < 0.001), longer disease duration (p < 0.001), higher total daily levodopa dose (p < 0.001), and higher total UPDRS scores (p = 0.005) than patients without dyskinesia. The three significant predictors of dyskinesia were duration of levodopa therapy, onset age, and total daily levodopa dose. Conclusions: The prevalence of levodopa-induced dyskinesia in our patients was 44%. The most significant predictors were duration of levodopa therapy, total daily levodopa dose, and onset age.

Keywords
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KeyWords Plus: MOTOR FLUCTUATIONS; ONSET; AGE

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