Turnings in Parkinson’s Disease

Khin Bo
Northern Lincolnshire and Goole Hospitals NHS Foundation Trust, UK

Statement of the problem: Cardinal signs of Parkinson’s Disease (PD) are Tremor, R rigidity, Bradykinesia and Postural instability (PI). It is the PI that make PD patients vulnerable to frequent and bad falls. It takes about seven years from disease onset to affect postural reflexes. PI is the result of impaired Anticipatory Postural Responses (APR). The purpose of the study is to compare Body Centre of Gravity (BCG) sway pattern in normal person and a person suffering from PD. Methodology: Graphic analysis of BCG sway in normal turning and in a patient suffering from PD. Finding: In normal body turning, BCG swayed outside the legs and in a patient with Parkinson's disease, BCG swayed within the legs. Non-PD person, turn angle amplitude is about 90 degrees with the first turning step. PD patient can only achieve a quarter of that. Conclusion & Significance: By keeping the BCG between the legs, the patient tried to maintain stability to compensate impaired APR. Keeping the BCG between the legs can help stability of the body and can prevent falls during the turnings. In early stages, Dopaminergic drugs can improve turnings and in later stages, mobility aids (walking sticks, frames) can improve stability. Rehabilitation strategies should focus to improve Postural Stability and supervised mobility is recommended in more advanced stages.

Biography
Khin Bo is a lecturer (Hon) in Hull & York Medical School. He is a Specialist in Spasticity Management and Functional Electrical Stimulation. He has been involved in the management of patients with Long Term Neurological patients in MDM setting for over ten years.

pace_ann@yahoo.ca