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Chapter 6.2

“Stops Walking when Talking” Does Not Predict Falls in Parkinson’s Disease (letter)

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Evaluating whether persons are unable to walk and talk simultaneously (“stops walking when talking”; SWWT) is a simple test with good predictive value for falls in frail, institutionalized elderly persons.¹ Because it is relevant to know whether this test has similar predictive value in other populations prone to falls, we studied SWWT in Parkinson’s disease (PD). Recurrent falls in PD are incapacitating, but their prediction is difficult.² Theoretically, SWWT should be sensitive in PD patients who have difficulty performing multiple tasks sequentially or simultaneously.³ This is also true when walking is one of the tasks.⁴

Thirty-eight patients with idiopathic PD (mean age, 60.1 ±10.8 [SD] years; 34% women; mean Hoehn and Yahr stage, 2.3 ± 0.7 [SD]) and 35 controls (mean age, 58.0 ± 8.9 [SD] years; 74% women) participated. All persons were ambulant community residents without depression or cognitive impairment (MMSE ≥ 24). SWWT consisted of a conversation during a standardized 150-meter walk (positive result if persons stopped walking for ≥ 3 seconds). Because we wanted the conversation to be cognitively challenging, the investigator (Y.A.M.G.) consistently used open (rather than closed) questions regarding details of the medical history and recent changes in medication. Such items are also emotionally important for most persons. Persons were followed up prospectively for 6 months, using standardized scoring forms to document all falls. Persons were also contacted by telephone every 2 weeks to ensure that all falls were documented. Recurrent (two or more) or injurious fallers were used as outcome measure. Fourteen of the PD patients (36.8%) reported 119 falls. Five of the controls (14.3%) reported a total of 7 falls. SWWT was abnormal in only 4 patients and in none of the controls. The reverse (stops talking while walking) never occurred. SWWT was positive in 2 patients that were fallers and in 2 patients who did not fall. Comparing fallers with nonfallers within the PD group, SWWT had a poor sensitivity (14.3%; 2/14), although the specificity was adequate (91.7%; 22/24). Pooling patients and controls improved the specificity (96.3%; 52/54) at the expense of the sensitivity (10.5%; 2/19). SWWT was an unexpectedly poor predictor of falls in PD. In fact, although many patients fell, the test was only rarely abnormal. Hence, even if SWWT had greater discriminative power, most falls would not have been predicted. In contrast, many frail elderly persons cannot walk and talk simultaneously¹, and this inability predicted falls much better than in PD. Differences in test execution are unlikely to underlie the discrepancy, although the nature of the conversation while walking was not specified in the original report of Lundin-Olsson and colleagues.¹ The key difference is that many persons in the earlier study¹ were demented or depressed, whereas we excluded patients with cognitive impairment. This suggests that impaired dual-task performance is a better marker of falls associated with cognitive impairment than (extrapyramidal) motor impairment. In addition, age differences may partially explain our observations (including those in controls), because all persons in our study were considerably younger than those studied by Lundin-Olsson and co-workers (mean age, 80.1 years).¹ We did confirm the high specificity of SWWT. Yet, even a normal test result has little value because SWWT
was normal in 17 subjects who were fallers. Finally, the low sensitivity obviously restricts the ability to identify eligible candidates for therapeutic intervention. We conclude that SWWT does not predict falls when cognition is preserved. The results of ongoing studies (www.carestudy.com/falls/intro.htm) should further delineate the clinical use of SWWT.

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REFERENCES