

Reliability Investigation of the Purdue Pegboard Test in Drug Off-phase for Parkinson's Patients

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Receive date: 10/3/2009
Accept date: 24/10/2009

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Abstract

Objective: Parkinson's disease (PD) is a common progressive neurodegenerative disorder, the onset is in later adulthood and its incidence increases in 55 to 60 years old. The purpose of this study was to determine the test-retest reliability and practice effects of the Purdue pegboard mostly is used in dexterity testing and rehabilitation evaluation, in Parkinson's patients.

Materials & Methods: In this analytical study which is validation and methodological research, 24 Parkinson patients aging 50-89 were simply and conveniently selected from rehabilitation clinics and hospitals of Tehran. Patients' general data were documented by demographic questionnaire and in order to determining the Purdue pegboard test each subtest was administered three times and was repeated one week later. Data were analyzed by Paired T test, Intraclass Correlation Coefficient (ICC) and Standard Error of Measurement (SEM).

Results: The rate of Intraclass Correlation Coefficient was above 90% in different items of Purdue pegboard test in single and mean of testes in off phase, thus indicates an excellent relative reliability in repeated measures. The rate of Standard Error of Measurement (SEM) was lower than 10% of maximum obtained scores at each subtest in one and three trials of test that indicates acceptable absolute reliability.

Conclusion: The findings indicate that Purdue pegboard test is reliable enough in evaluating a manual dexterity of Parkinson patients in drug off-phase.

Keywords: Parkinson's disease/ Purdue pegboard test/ Reliability/ Test-retest