

RELATIONSHIPS BETWEEN OBJECTIVELY AND SUBJECTIVELY ASSESSED GAIT PERFORMANCE IN PERSONS WITH POST-POLIO SYNDROME

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Introduction

A common impairment in persons with post-polio syndrome (PPS) is muscle weakness in the lower limb, which often impedes on the ability to walk in various environments. In a rehabilitation perspective, it is of interest to assess gait performance not only objectively, but also subjectively to be able to evaluate if the interventions have had any impact on the person's ability to perform daily activities. Several instruments are used to assess gait performance, but to our knowledge the relationship between them is limited.

Aim

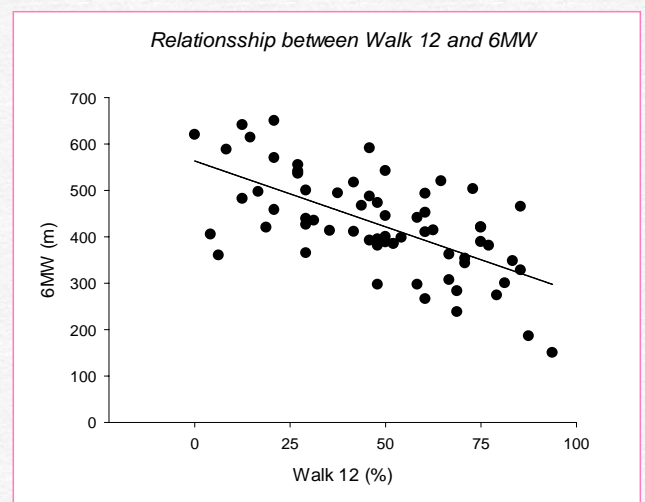
To assess the relationship between objectively and subjectively assessed gait performance in persons with PPS.

Methods and material

Sixty persons (29 men, 31 women, mean age 61 years) with clinically verified PPS. Gait performance was objectively assessed using the: i) Timed "Up & Go" (TUG); ii) 10 metres Comfortable Gait Speed (CGS); iii) 10 metres Fast Gait Speed (FGS); and iv) 6-Minute Walk (6MW). These tests have previously been shown, in our research group, to be highly reliable in individuals with PPS. Self-perceived walking ability was evaluated using the Swedish version of the "Walking Impact Scale" (Walk-12). The participants rated on a five-point Likert scale (from not at all to extremely) their self-perceived limitations when walking and performing ambulatory movements, over the past two weeks.

Results

The Pearson correlation coefficient revealed that there were significant correlations between Walk-12 and all the objective gait performance tests ($r = 0.52$ to 0.67 ; $p < 0.001$). In the figure the correlation between 6MW and Walk-12 is presented ($r = -0.64$; $p < 0.001$).



Conclusions

Objectively measured gait performance is associated with subjectively assessed gait performance in persons with PPS. Subjectively assessed gait performance, using tools such as the Walk-12, can therefore complement objective assessments when walking ability is evaluated in persons with PPS.