Convergent construct validity of the 400 points hand function test is better with function the subscore of the PRWE (Patient Rated Wrist Evaluation) questionnaire than with the total score

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References

Objective.-- The 400 points hand function test provides an extensive evaluation of the hand. Its validity has been studied little [1]. The Patient Rated Wrist Evaluation (PRWE) questionnaire has the advantage of having subscores for function and pain. The objective of this study was to measure the convergent validity of the 400 points hand function test with the French version of PRWE.

The hypothesis was that there is a better correlation between the 400 points hand function test and the subscore for function of the PRWE-F.

Material and methods.-- 30 patients (23 m, 7 w, mean age 41,4), 14 fractures of the radius, 16 lesions of the carpus. PRWE-F and 400 points hand function test at entry and discharge. Correlation coefficients (Pearson’s) between the 400 points hand function test and the 3 dimensions of the PRWE-F, with corresponding 95% Confidence Intervals (CI).

Results

PRWE total/400 points:
Entry: r = –0,388 (IC: –0,657 to –0,032) P = 0,0341.
Discharge: r = –0,515 (IC: –0,738 to –0,190) P = 0,0036.

PRWE function/400 points:
Entry: r = –0,419 (IC: –0,677 to –0,069) P = 0,0213.
Entry: r = –0,593 (IC: –0,786 to –0,296) P = 0,0006.

PRWE douleur/400 points:
Entry: r = –0,318 (IC: –0,608 to 0,048) P = 0,0870.
Discharge: r = –0,385 (IC: –0,654 to –0,028) P = 0,0359.

Discussion.-- The results confirm the hypothesis of the study. The subscore function of the PRWE presents the best correlation with the 400 points hand function test. The correlations, however moderate and with large confidence intervals, are comparable to those found in the literature (0.52) [2]. The moderate correlation may be explained by the different concepts behind the two tools: the PRWE is a self-evaluation tool where the patient has to imagine given activities (subjective); the 400 points hand function test is a real-situation test (objective).

In spite of our relatively small sample, our results are significant and reinforce knowledge on the construct validity of the 400 points hand function test.

Keywords: 400 points hand function test; PRWE questionnaire; Construct validity; Wrist

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The Instrumental Activities of Daily living Profile: An assessment tool to measure the effect of a rehabilitation program on persons’ improvement in activities and participation following an acquired brain injury. Results

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The Hypothesis was that there is a better correlation between the 400 points hand function test and the subscore for function of the PRWE-F.

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The hypothesis was that there is a better correlation between the 400 points hand function test and the subscore for function of the PRWE-F.

Material and methods.-- 30 patients (23 m, 7 w, mean age 41,4), 14 fractures of the radius, 16 lesions of the carpus. PRWE-F and 400 points hand function test at entry and discharge. Correlation coefficients (Pearson’s) between the 400 points hand function test and the 3 dimensions of the PRWE-F, with corresponding 95% Confidence Intervals (CI).

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References


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Keywords: Acquired brain injury (ABI); Program’s assessment; Instrumental Activities of Daily living Profile’s (IADL)

Background.-- Cognitive and behavioural difficulties following acquired brain injury (ABI) may lead to severe limitations in activities and restrictions in participation. A specific ABI, holistic and multidisciplinary rehabilitation program was developed at the Pitié-Salpêtrière hospital. Over a 7-week period, the program aims to improve participants’ participation by combining individual rehabilitation and environmental scenarios such as the shopping, meal preparation, transportation, etc. The effectiveness of this program has never been formally studied.

Objectives.-- To document the effect of the program for 4 adults with ABI on 1) activities specifically trained during the program (shopping and meal preparation), and 2) activities not trained as part of the program (searching for information and making a budget) and this, using an ecological assessment called the Instrumental Activities of Daily living Profile’s (IADL) (Bottari, 2010).

Methods.-- Repeated measures pre and post program with multiple single case analyses. IDAL evaluations were conducted by an occupational therapist at each program participants’ home at four times: pre-treatment (T1 or 3 weeks prior to program admission) and 3 post treatment measurements (T2 at 1 week, T3 at 3 months, T4 at 6 months).

Results.-- For 3 of the 4 subjects, the need for assistance decreased between T1-T2 and T2-T4 for the trained activities (shopping and meal preparation) and improvement was observed for each component of the activities (goal setting, execution and initial goal attainment) (Luria, 1966) and up to 6 months post program. For example, a subject was deemed “dependent” at T1 for each component of activities but later only required “verbal assistance” or was deemed “independent” at T2. Three of the 4 subjects did not demonstrate improvements for the untrained activities.

Discussion.-- The decreased need for assistance documented with the IADL for the trained activities and the lack of improvement for untrained activities suggest a positive effect of the program. However the changes between T1 and T2 could be due to the combination of a learning effect associated with the IADL tool and the effect of the program.


Laboratoire Habitat Handicap (L2H) of Limoges: Evaluation of assistive technology

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Keywords: Assistive technology; Laboratoire Habitat Handicap; Evaluation

Introduction.-- The Laboratoire Habitat Handicap (L2H) has been open for one year inside the rehabilitation department of the University of Limoges. It has a 70 m² floorspace with different spaces (kitchen, bathroom, bedroom, office, outdoor). It allows for both the collection of data on individual need for human help and assistive technology devices for disabled persons and evaluation in real life situations (simulation in the L2H).

Objective.-- Evaluation of benefit for people who have lost independence and who use technical aids recommended in L2H.

Methods.-- Telephone survey with collection rate of acquisition, abandon and satisfaction (as recommended by the HAS) of technical aids and/or new technology devices recommended in the L2H. The reasons for no acquisition or abandon of technical aids were collected. Satisfaction was assessed by four-level Likert scale.

Results.-- During the first 9 months of operation (April–December 2010), 123 disabled persons used the L2H, (71 men, 52 women). Eighty-seven percent