

Implications: Although the study design used here i.e., prospective cohort, is not the most recommended for investigating the effects of interventions, FT seems to be an effective strategy for improving the functional capacity of individuals with SCI, and therefore can be incorporated into the rehabilitation of this group.

Keywords: Spinal cord injury, Functional training, Functional capacity

Conflict of interest: The authors declare no conflict of interest.

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CAN THE BEDDING BRIDGE TEST IN HOSPITALIZED PATIENTS PREDICT OUTCOMES AFTER 6 MONTHS OF FOLLOW-UP?

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Background: Early detection of functional limitations remains an important goal to prevent disability in individuals who have been hospitalized.

Objectives: To examine the association between versions of the bed bridge test (BBT), a new functional test to assess hospitalized patients, and post-hospitalization outcomes such as return to work, death, readmission and falls in individuals after six months of discharge.

Methods: This is a longitudinal, observational, prospective study, in which 92 hospitalized patients eligible for the study performed in random order o BBT: 5 repetitions (BBT5R) and 10 repetitions (BBT10R), 30 seconds (BBT30sec) and 60 seconds (BBT60sec). Socio-demographic data, diagnosis, comorbidities, and length of stay were recorded. Six months after hospital discharge, telephone contact was made and information was obtained on return to usual/work activities, rehospitalization, falls, functional independence, and the patient's vital status. Bivariate correlation analysis was performed. The independent variables were gender, age, comorbidities, length of stay, and performance on the BBT versions. The dependent variables were usual/work activities, rehospitalization, falls, functional independence, and death. Linear regression models were used to determine whether the BBT versions and sociodemographic variables predict return to usual/work activities, rehospitalization, falls, functional independence, and death.

Results: The participants (50.9±17.2 years old, 60% women) included in the study were composed of 66% with clinical condition and 34% with surgical condition. All versions of the BTT were associated with age and FSS comorbidity (rs=-0.50 to -0.20 and 0.28 to 0.43; p<0.05 for all). Only BBT30s (rs=0.28) and BBT60s (rs=0.37) were directly associated with returning to usual/work activities. There was no association between the BBT versions and the other dependent variables. Patients who resumed their usual/work activities performed better in BBT30s and BBT60s when compared to those who did not resume their activities (BBT30s = 19 ± 6 vs 15 ±

3.5 repetitions, p=0.007; and BBT60s = 35 ± 11 vs 30 ± 5.4; p=0.015). Lower comorbidity score, female gender, and better performance on the BBT60s were independent predictors of higher return to work, explaining 40% of the variation.

Conclusion: This study demonstrated a modest association between return to work 6 months after discharge and better performance on the BBT60s during hospitalization, including lower scores for comorbidities and female sex. This relationship should be interpreted with caution and confirmed in future studies. The BBT60s is a simple, quick, and useful way to include hospitalized people in the follow-up.

Implications: This study allows us to present suggestions for future studies. Thus, it is suggested to continue investigating whether the BBT can be used as a predictor of other outcomes.

Keywords: Hospitalization, Patient outcome assessment, Mobility Limitation

Conflict of interest: The authors declare no conflict of interest.

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CLINIMETRIC PROPERTIES OF THE BRIDGE TEST IN BED FOR HOSPITALIZED PATIENTS

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Background: Functional performance tests are often not applicable to bedridden patients. The proposal to perform a physical test that requires little equipment, minimal training and simple execution in bed, expands the opportunity for evaluation and rehabilitation strategies for a variety of hospitalized patients, from bedridden to independent ones. Thus, the bed bridge test (BBT), and its time-limited and repetition-limited versions, may constitute a new functional test.

Objectives: To test the clinimetric properties of BBT reliability and validity: 5 repetitions (BBT 5R) and 10 repetitions (BBT 10R), 30 seconds (BBT 30sec) and 60 seconds (BBT 60sec), in hospitalized patients.

Methods: Were included 92 patients eligible for the study performed in random order the BBT5rep, BBT 10rep, BBT 30sec and BBT 60sec repeated on two days with an interval of 48 hours. Validity was tested by correlation analysis between the Functional Status Score (FSS) scale, the sit-to-stand test (BBT) and the Short-Physical Performance Battery test (SPPB). With data from day 2, reproducibility was analyzed with the intraclass correlation coefficient (ICC), standard error of measurement (SME) and minimum detectable difference (DMD). Effect floor and ceiling were also tested.

Results: Participants were 50.9±17.2 years old, 60% women and 66% with clinical condition. The test-retest ICC (95%) was good to excellent (BBT 5R CCI:0.89, 95%CI 0.84-0.93; BBT 10R CCI:0.92, 95%CI 0.88-0.95; BBT 30sec CCI:0.87, 95%CI0.80-0.91; and BBT 60sec CCI:0.88, 95%CI0.83-0.92). The concordances observed for the BBT 5R were EPM: 1.2 and DMD: 3.4; for BBT 10R EPM: 1.8 and DMD: 5.0, for TPL30sec EPM: 1.6 and DMD: 4.4; and for BBT 60sec EPM: 2.8 and DMD: 7.6. There were appropriate ceiling and floor effects for all versions. Content validity was observed by the weak association between the performance of the BBT versions and the