Prediction of Mobility Limitations after Hospitalization in Older Medical Patients by Simple Measures of Physical Performance Obtained at Admission to the Emergency


Engelsk resume:

OBJECTIVE:
Mobility limitations relate to dependency in older adults. Identification of older patients with mobility limitations after hospital discharge may help stratify treatment and could potentially counteract dependency seen in older adults after hospitalization. We investigated the ability of four physical performance measures administered at hospital admission to identify older medical patients who manifest mobility limitations 30 days after discharge.

DESIGN:
Prospective cohort study of patients (≥65 years) admitted to the emergency department for acute medical illness. During the first 24 hours, we assessed: handgrip strength, 4-meter gait speed, the ability to rise from a chair (chair-stand), and the Cumulated Ambulation Score. The mobility level 30 days after discharge was evaluated using the de Morton Mobility Index.

RESULTS:
A total of 369 patients (77.9 years, 62% women) were included. Of those, 128 (40%) patients had mobility limitations at follow-up. Univariate analyzes showed that each of the physical performance measures was strongly associated with mobility limitations at follow-up (handgrip strength(women), OR 0.86 (0.81-0.91), handgrip strength(men), OR 0.90 (0.86-0.95), gait speed, OR 0.35 (0.26-0.46), chair-stand, OR 0.04 (0.02-0.08) and Cumulated Ambulation Score OR 0.49 (0.38-0.64). Adjustment for potential confounders did not change the results and the associations were not modified by any of the covariates: age, gender, cognitive status, the severity of the acute medical illness, and the Charlson Comorbidity Index. Based on prespecified cut-offs the prognostic accuracy of the four measures for mobility limitation at follow-up was calculated. The sensitivity and specificity were: handgrip strength(women), 56.8 (45.8-67.3), 75.7 (66.8-83.2), handgrip strength(men), 50.0 (33.8-66.2), 80.8 (69.9-89.1), gait speed, 68.4 (58.2-77.4), 81.4 (75.0-86.8), chair-stand 67.8 (58.6-76.1), 91.8 (86.8-95.3), and Cumulated Ambulation Score, 40.2 (31.6-49.2), 92.0 (87.1-95.4), respectively.

CONCLUSION:
Physical performance measures, particularly chair-stand and gait speed assessed at admission to an emergency department, were able to identify mobility limitation in acutely admitted older medical patients 30 days after hospital discharge.

Læs den fulde artikel: https://research.regionh.dk/files/46533886/Prediction_of_Mobility_Limitations_after.pdf

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