THE 30-S CHAIR STAND TEST AND HABITUAL MOBILITY PREDICT REHABILITATION NEEDS AFTER ACUTE ADMISSION

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KEEP ME GOING

– Although I'm older

The 30-second Chair Stand Test and habitual mobility predict rehabilitation needs after acute admission

Introduction

Self-reported information has been used in emergency departments to identify elderly with disability. In this study physical performance measures were included to identify old patients with risk of reduced physical performance after acute hospitalisation.

Aim

This prognostic cohort study aimed to develop a simple clinically relevant model, which can help to identify elderly medical patients with reduced physical performance one month after acute hospitalisation.

Materials and Methods

Acutely admitted patients aged 65 years or older with a score of ≤ 8 in the 30-second Chair Stand Test (30s-CST) were included. Fourteen prognostic factors were collected within the first 48 hours of admission. The outcome was 30s-CST one month after the admission. Factors of interest' were identified by multivariate analysis.

Results

A total of 117 patients were included. The analysis showed that 30s-CST ≤ 5 and using gait aid in or outdoors were significant predictors, whereas, age and gender, were pre-selected. The area under the curve (AUC) for full model = 0.80.

Clinical prediction model for identification of acutely admitted elderly patient at risk for reduced physical performance (30s-CST≤ 8) one monthe after the admission.

	Score
Age > 85	0.2
Gender - female	1.5
Using gait aid	3.8
30s CST ≤ 5	4.5
	10

Score > 4.5

Sensitivity (95%CI)	Specificity (95%CI)	Positive predictive value (95 % CI)	Negative predictive value (95 % CI)
82 % (71-90)	59% (42-74)	79% (67-87)	63% (46-78)

Discussion

The prediction model is simple and easy to use in the endeavor to identify older adults with reduced physical performance one month after hospitalisation.
However, before clinical implementation, a demonstration on a larger sample is needed, as well as external validation.

Conclusion

The study has shown that it is possible to identify older adults with reduced physical performance at time of admission using physical performance measures.

The poster is available by accessing the QR code

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