

뇌신경재활

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OP2-1-5

Development of Predictive Model for Moderately Disabled Stroke Patients with Difficult to Discharge

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Background and Purpose

To develop an assessment tool that predicts the possibility of returning home after acute stroke rehabilitation, specifically for moderately disabled stroke patients whom difficult to predict discharge destination.

Methods

Stroke patients with modified Rankin scale score of 3 or 4 were included for this prospective cohort study. Various demographic, clinical, and functional factors were analyzed as potential predictive factors. A Weighted scoring model was developed through a three-step process: 1) selection of the factors by logistic regression analyses, 2) weighted scoring model development, and 3) validate the generalizability.

Results

Of the 732 patients, 372 patients (51%) return home at discharge and the mean length of stay of all participants was 32.5 days. 1) Cognitive Functional Independence Measure (FIM), 2) Functional Ambulation Categories (FAC), 3) Charlson comorbidity index (CCI), and 4) marital status were independent predictors for home discharge. The cognitive FIM was categorized into 3 groups based on the severity and awarded a score of 0, 3, and 6.

The FAC, CCI, and marital status were categorized into 2 groups, and given a score of 4, 2, 1 or 0, respectively. The total score ranged from 0 to 13 in this model, with a higher score indicating a higher probability of home discharge. In the cutoff point 7, this model showed a sensitivity of 83.5% and specificity of 82.3% (area under the curve=0.87).

Conclusions

A novel assessment model for the patients with moderate disability can help to make more reliable discharge plan after acute stroke rehabilitation.