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

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Introduction

Many elderly patients experience a physical decline after acute admissions. To prevent this early rehabilitation is required. However, currently we do not know whom among these patients are at risk of a functional decline.

Aim

This prognostic study aimed to develop a predictive model which can help to identify elderly with medical complaints who one month after hospitalization have a reduced physical ability.

Materials and Methods

In this prospective cohort study 117 acute admitted elderly with a score ≤8 in the 30-second chair stand test (30s-CTS) were included. Fourteen prognostic factors were collected within the first 48 hours of admission. Outcome were 30s-CTS one month after the admission. Three significant factors were identified by multivariable backward stepwise logistic regression analysis. A score chart was constructed by using the regression coefficient estimates.

Results

Scoring Chart

<table>
<thead>
<tr>
<th>Gender (women)</th>
<th>point</th>
</tr>
</thead>
<tbody>
<tr>
<td>With difficulties climbing a flight of stairs without rest</td>
<td>10</td>
</tr>
<tr>
<td>Using gait aid indoor and/or outdoor</td>
<td>25</td>
</tr>
<tr>
<td>Score ≤ 5 in 30sCTS</td>
<td>30</td>
</tr>
<tr>
<td>Score ≤ 5 in 30sCTS</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

Discriminative Ability

<table>
<thead>
<tr>
<th>Number of patients with a 30s-CTS score ≤ 8 (n=76)</th>
<th>Number of patients with a 30s-CTS score &gt; 8 (n=41)</th>
<th>Sensitivity (95% CI)</th>
<th>Specificity (95% CI)</th>
<th>PPV (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score &gt; 65</td>
<td>56</td>
<td>31</td>
<td>74% (63-83)</td>
<td>76% (60-88)</td>
</tr>
</tbody>
</table>

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