Practical severity scoring for acute admissions with COPD: Who can we send home from the AMU?

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Aim

The DECAF score is a novel severity scoring system recently proposed for patients admitted with acute exacerbations of COPD. It has been suggested that the use of this score could help identify those needing higher-level care or suitable for early discharge. Our study aimed to practically validate this score in a busy urban Acute Medical Unit.

The DECAF Score

<table>
<thead>
<tr>
<th>Dyspnoea (eMRCD Score)</th>
<th>5a = 1</th>
<th>5b = 2</th>
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<tbody>
<tr>
<td>Eosinopenia (&lt;0.05x10^9/l)</td>
<td>1</td>
<td></td>
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<tr>
<td>Consolidation</td>
<td>1</td>
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<tr>
<td>Acidemia (pH &lt;7.3)</td>
<td>1</td>
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<tr>
<td>Fibrillation (atrial)</td>
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TOTAL SCORE = /6

MRC 5a: too breathless to leave the house and independent in washing and/or dressing
MRC 5b: too breathless to leave the house and dependent in washing and dressing

Outcomes/Results

In agreement with the proposing institution, our cohort demonstrates increasing in-hospital mortality with increasing DECAF score. Importantly, those with a DECAF score of 0 had a 0% in-hospital mortality. Those with a DECAF score of 1 or 2 had a much lower in-hospital mortality compared with those with a DECAF score of 3 or 4 (5% vs 42%).

Methods

93 consecutive admissions with acute exacerbations of COPD were retrospectively scored according to the DECAF model at Queen Elizabeth Hospital, Woolwich. The in-hospital mortality rate was then recorded, stratified by DECAF score, and compared to that at the proposing institution.

Conclusion

Our practical validation would favour an early discharge of patients with a DECAF score of 0 from the AMU. It would also favour higher-level care for patients with a DECAF score of 3 or above. Further, more powerful validation of the DECAF score should take place before deciding whether to support its application in acute medical practice.


Conflicts of Interest: The Authors declare that there are no conflicts of interest.