Atrial Fibrillation (AF) in the Acute Medical Unit (AMU): A Day in the Life National Survey

Balasanthiran A, Soong J, Wynter E, Ward D, Macleod D & Bell D

Background: Atrial Fibrillation (AF) is the most common cardiac dysrhythmia whose clinical sequelae include stroke and heart failure. NICE have produced guidelines for the management of AF relevant to secondary care. This national survey aims to determine adherence to practice within Acute Medical Units (AMUs).

Methodology: An online survey against best practice was designed to assess the current management of patients with AF in an AMU setting. Data was collected from 175 AMUs (33% of 225 that were approached). All adult patients admitted over a specific 24 hour time period (14th-15th September 2011-15th September 2011).

Demographics

AF Presentations

<table>
<thead>
<tr>
<th>Age Range</th>
<th>0-19 years</th>
<th>20-29 years</th>
<th>30-39 years</th>
<th>40-49 years</th>
<th>50-59 years</th>
<th>60-69 years</th>
<th>≥70 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients</td>
<td>14</td>
<td>17</td>
<td>24</td>
<td>24</td>
<td>5</td>
<td>26</td>
<td>87</td>
</tr>
</tbody>
</table>

CLINICAL PRACTICE:
• 22.8% (n=34) of patients who presented with AF had a documented Stroke Risk Score.
• 79.1% (n=73) of patients with a significant risk for thromboembolic stroke (CHA₂DS₂VASc score of > 2) were not prescribed anticoagulation therapy at time of discharge.
• There was a trend to poorer documentation of stroke risk in patients who presented with AF out of hours.(p=0.29).

NICE GUIDELINE: The stroke risk stratification algorithm should be used in patients with AF to assess their risk of stroke and thromboembolism, and appropriate thromboprophylaxis given.

Patients who presented with AF out-of-hours tended not to be discharged within 24 hours. (28.6% of patients presenting out of hours vs 45.7% of patients during normal working hours)(p=0.06).

Results:

23.8% (N=15 / 63)of patients with a significant risk of major bleeding (HAS-BLED score of ≥3: 8.7 major bleeds per 100 patient-years) were discharged on full anticoagulation, with four patients in this group also being discharged on antiplatelet therapy.

27.2% (n=18) of patients with a documented Stroke Risk Score had no anticoagulation.

Patients who presented with AF out of-hours tended not to be discharged within 24 hours. (28.6% of patients presenting out of hours vs 45.7% of patients during normal working hours)(p=0.06).

CLINICAL PRACTICE:
• Adherence to evidenced based standards remains less than exemplary in the intervening 5 years since NICE first published guidelines for the management of Atrial Fibrillation.
• Our survey of secondary care practice highlight failings in choice of antiarrhythmic agents, assessment of thromboembolic risk balanced with bleeding risk, timeliness of anticoagulation and variation in healthcare out-of-hours.
• It highlights difficulties in "real-world" implementation of best available evidence.
• Study into barriers of good practice at the coal face and effective solutions to overcome them, is an area of much needed research.

Limitations:
• This was a self-reported snap-shot survey of practice
• 75 of 225 AMUs responded (33.3%)
• No distinction for zero admission on the day to explain under-representation

Conclusion:

References: