Does a Brief Educational Intervention Allow for Greater Prehospital Recognition of Acute Stroke by Paramedics?

Tara K. Henry-Morrow EMT-P
Lehigh Valley Health Network, Tara.Henry-Morrow@lvhn.org

Bryan D. Nelson MBA, NR-P
Lehigh Valley Health Network, Bryan_D.Nelson@lvhn.org

Erin M. Conahan RN, CNRN
Lehigh Valley Health Network, Erin_M.Conahan@lvhn.org

Claranne Mathiesen RN, MSN, CNRN
Lehigh Valley Health Network, Claranne.Mathiesen@lvhn.org

Bernadette Glenn-Porter BS
Lehigh Valley Health Network, Bernadette.GI-Porter@lvhn.org

See next page for additional authors

Follow this and additional works at: http://scholarlyworks.lvhn.org/emergency-medicine

Part of the Emergency Medicine Commons

Published In/Presented At


This Poster is brought to you for free and open access by LVHN Scholarly Works. It has been accepted for inclusion in LVHN Scholarly Works by an authorized administrator. For more information, please contact LibraryServices@lvhn.org.
Does a Brief Educational Intervention Allow for Greater Prehospital Recognition of Acute Stroke by Paramedics?

Lehigh Valley Health Network, Allentown, Pennsylvania

CONCLUSIONS

- An educational intervention that emphasized early stroke recognition doubled the rate of prehospital alerts
- The proportion of patients correctly identified as stroke and the proportion of patients receiving intravenous lytic therapy or endovascular reperfusion remained constant
- An educational intervention directed at paramedics increased the absolute number of therapeutic interventions

METHODS

- This was a prospective before and after study.
- An 8 hour didactic and scenario-based class was presented to 25 full time and 15 part time paramedics to one service with approximately 16,900 calls per year
- The total number of prehospital stroke alerts called by this cohort was compared to the stroke alerts called by the same ambulance service prior to the educational intervention.

RESULTS

- Mean number of stroke alerts increased from 2 to 3.4 per month, p<.0001.
- Number of alerts determined to represent true stroke increased from 63 to 71%, p>0.2.
- IV TPA use increased from 50% to 54%, p>0.6.


<table>
<thead>
<tr>
<th>Period</th>
<th>Stroke Alerts per Total Number of 911 Calls</th>
<th>True Strokes as a Percentage of Stroke Alerts</th>
<th>% Non-Hemorrhagic Strokes Receiving TPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>82 (24090)</td>
<td>79%</td>
<td>70%</td>
</tr>
<tr>
<td>B</td>
<td>34%</td>
<td>70%</td>
<td>47%</td>
</tr>
</tbody>
</table>

BACKGROUND

- Identification of candidates for acute stroke therapy in the prehospital setting has potential to reduce time to treatment and increase acute stroke interventions
- Purpose of this trial was to determine if a brief educational intervention for prehospital providers would increase identification of stroke victims without compromising the accuracy of stroke alerts called in the field

- An 8 hour didactic and scenario-based class was presented to 25 full time and 15 part time paramedics to one service with approximately 16,900 calls per year
- The total number of prehospital stroke alerts called by this cohort was compared to the stroke alerts called by the same ambulance service prior to the educational intervention.