Transient Ischemic Attack
Observe

Neil Culligan, M.D
Director, Danbury Hospital Stroke Center
Chief, Section of Neurology, Danbury Hospital
Clinical Assistant Professor,
University of Vermont School of Medicine
Presenter Disclosure Information

Neil Culligan, M.D
TIA: Observe

Financial Disclosure:
No relevant financial relationship exists
Does Your Hospital Currently Have An Observation Unit?

1. Yes
2. No
Danbury Hospital Stroke Center
Observation Unit

Not an admission: “stay no longer than 24 hours and in rare cases extend past 48 hours”

Complete resolution of symptoms

Hospitalist coverage

Workup within 24 hours

(7 day availability for echo and carotid US)

Neurology Consult mandatory
TIA

Observe/Admit vs. Discharge
Event Risk Within 3 Months After TIA

Independent risk factors for stroke within 90 days after TIA:
- Age > 60 years
- Diabetes mellitus
- Duration of episode greater than 10 min
- Weakness and speech impairment with the episode

Patients arriving at ED within 2 hours of symptom onset:

Car: 36%
911: 56%

MMWR 2007; 56(19)
Which of the following statements is most relevant for stroke providers:

1. Time Is Money
2. Time is Fleeting
3. Time Is Brain
4. Does Anybody Really Know What Time It Is, Does Anybody Really Care?

![Graph indicating that Time Is Brain is the most relevant statement]

0% 0% 0% 0%
Odds of a Favorable 3-Month Outcome by Time From Stroke Onset to Start of Treatment:

<table>
<thead>
<tr>
<th>Symptom to TPA</th>
<th>Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-90 min.</td>
<td>2.55</td>
</tr>
<tr>
<td>91-180 min.</td>
<td>1.64</td>
</tr>
<tr>
<td>181-270 min.</td>
<td>1.34</td>
</tr>
<tr>
<td>271-360 min.</td>
<td>1.22</td>
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Lancet 2010;375:1695-1703

Hospitalization after TIA Cost-effective On the Basis of Treatment with TPA

Neurology 2005;65:1799-1801
Stroke Risk After TIA

TIA patients evaluated within 24 hours

• EXPRESS 80% reduction in 90 day stroke risk
• SOS-TIA 90 day stroke risk 1.6% vs. predicted 6.5%

Lancet Neurology 2009;8:235-43
Lancet Neurology 2007;6:953-60
Stroke Risk Scores

- ABCD2 score > 5 has 29% sensitivity
- ABCD2 score > 2 has 12% specificity
- ABCD3-I score adds predictive value but based on carotid US and MRI results
- Four studies with 2,416 patients found no differences in characteristics of TIA’s that preceded stroke

CMAJ online June 6, 2011
Lancet Neurology 2010;9:1060-9
Neurology 2005;64:817-20
TIA

Observe vs. Admit
Observe vs. Admit

Avoid “turf” wars between ED and admitting team
When an auditor determines that a hospital inpatient stay should have been classified as an observation stay, the hospital loses the full Medicare payment for the stay. One hospital in Washington D.C. lost $600,000 over “misclassifications”.

Advisory Board
OBV vs. Admit

“In a decision analysis model, we observed that hospitalization for TIA is not cost effective compared to an expedited same-day clinic model”

Neurology 2011;77;2082
Danbury Hospital Stroke Center Observation Unit

Average charges for OBV stay $5,764.67 less than for inpt. stay
## Danbury Hospital Stroke Center

### TIA 2010-2012 Readmission Rates

<table>
<thead>
<tr>
<th></th>
<th>OBV</th>
<th>Inpt.</th>
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<tbody>
<tr>
<td><strong>TIA:</strong></td>
<td>0.38%</td>
<td>0.59%</td>
</tr>
<tr>
<td><strong>Stroke:</strong></td>
<td>1.15%</td>
<td>1.48%</td>
</tr>
</tbody>
</table>
Danbury Hospital Stroke Center

TIA 2010-2012

Observation Unit 261
Inpatient 337
Summary

OBV Advantages

Avoid disposition battles
Better outcomes vs. discharge
Lower cost than inpatient
Avoid Medicare denials
Summary

OBV Advantages

Does Anybody Really Know What A TIA Is, Does Anybody Really Care?

Time Definition, Tissue Definition, Diffusion Weighted Imaging, Perfusion Scanning, ABCD2, ABCD3, Capsular Warning Syndrome, Vertebrobasilar Stenosis, TIA Admission Score