MILD STROKES – TO TREAT OR NOT TO TREAT

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BACKGROUND

• Over half of the ischemic strokes in the US are “mild” by NIHSS Scores at presentation.
• The most common reason for withholding tPA in patients who arrive in time is that the stroke is “too mild.”
• Based on mounting evidence that mild strokes may cause significant disability, the stroke team at Saint Luke’s Neuroscience Institute (SLNI) began to consider mild strokes (NIHSS 0-5) eligible for treatment with IVtPA in 2009.

This analysis evaluated whether more aggressive treatment of mild strokes with IVtPA resulted in better overall outcomes measured by a greater percentage of patients being discharged home with fewer discharges to skilled nursing facilities (SNF) and lower mortality.

METHODS

We retrospectively reviewed strokes in the SLNI database with presenting NIHSS scores of 0-5 in 2007/2008 and in 2010/2011 by treatment status and discharge disposition. Bleeds were ruled out in all patients prior before administration of IVtPA.

RESULTS

<table>
<thead>
<tr>
<th>Mild Strokes (N) NIHSS score ≤ 5</th>
<th>2007-2008</th>
<th>2010-2011</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treated with IV tPA</td>
<td>11 (3.2%)</td>
<td>62 (15.7%)</td>
<td>0.001</td>
</tr>
<tr>
<td>Discharged Home</td>
<td>218 (63.7%)</td>
<td>310 (71.8%)</td>
<td>0.017</td>
</tr>
<tr>
<td>Discharged to SNF*</td>
<td>45 (13.2%)</td>
<td>42 (9.7%)</td>
<td>0.133</td>
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<tr>
<td>Mortality **</td>
<td>9 (2.6%)</td>
<td>3 (0.7%)</td>
<td>0.030</td>
</tr>
</tbody>
</table>

* In cases treated with tPA in both cohorts, discharge to SNF = 5/79 (6.3%)
** Of the 12 total mortalities, two were treated with IV tPA

CONCLUSION

• It may be safe to administer IVtPA to patients with mild strokes.
• There is a trend toward more aggressive treatment of mild strokes being associated with a higher likelihood of being discharged to home, fewer discharges to SNF, and lower mortality in the group as a whole.
• A randomized prospective trial would be useful to further direct decision making in this group of patients with mild strokes.

REFERENCES

Laroi, C. Rare Analyses Suggest That Giving tPA to Patients With Mild Strokes Could Prevent 2,000 Cases of Disability Annual. Neurology Today. 2011; 11(6): 24