MGH Emergency Department Acute Stroke Protocol for Thrombolysis (IV/IA)

Prior to making any medical decisions, please view our disclaimer.

This protocol was developed and approved by the multidisciplinary Acute Stroke Quality Taskforce and outlines the major responsibilities for the urgent evaluation and treatment of acute stroke patients who present to the ED.

Please refer to other guidelines for the management of inpatients with acute stroke symptoms.

Protocol Activation

Activate the Acute Stroke Protocol (group page ED2CT) for all patients who were Last Seen Well (LSW) less than 12 hours before ED arrival with acute neurological symptoms. In cases with fluctuating symptoms, those with complex issues, or who may be candidates for acute clinical research, the protocol should also be activated, independent of LSW time.

NIH and DPH Recommended Time Targets

The following chart outlines the Time Targets mentioned in the Massachusetts Department of Public Health Primary Stroke Service (DPH PSS) Regulations and recommended by the NIH NINDS Consensus Panel, [ref 1-5]. It is included to aid assessment of the timeliness of activities related to stroke evaluation and diagnosis.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Recommended Time Targets</th>
<th>MGH ED Time Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door to physician</td>
<td>≤ 10 minutes</td>
<td>≤ 5 minutes</td>
</tr>
<tr>
<td>Door to stroke team</td>
<td>≤ 15 minutes</td>
<td>≤ 5 minutes</td>
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<tr>
<td>Door to CT or MRI scan initiation</td>
<td>≤ 25 minutes</td>
<td>≤ 25 minutes</td>
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<tr>
<td>Door to CT or MRI scan interpretation</td>
<td>≤ 45 minutes</td>
<td>≤ 30 minutes</td>
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<tr>
<td>Time from order of lab tests to completion of tests, report of results, and interpretation</td>
<td>≤ 45 minutes</td>
<td>≤ 30 minutes</td>
</tr>
<tr>
<td>Door-to-needle for IV (t-PA)</td>
<td>≤ 60 minutes</td>
<td>≤ 45 minutes</td>
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</tbody>
</table>

The protocol is divided into the following sections:

- Pre-Thrombolysis
- IV t-PA Treatment
- IV t-PA Administration
- Protocol for use of IV tPA in the 3-4.5 hour window
- Intra-arterial Therapy (IAT)
- Post-IV tPA Transfer Protocol
- Blood Pressure Management
- Special Considerations

References
