



Stroke Care 2006: Clinical Consensus and Opportunities

Stroke Care within the 3 Hour Window for IV tPA Use:

Why tPA? And if Not, What Alternatives?

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Learning Objectives

- Discuss the current use of tPA given the NINDS clinical trial data, the reanalysis of this data, and the presence of phase IV data that confirms its clinical efficacy.
- Determine if there are other therapies that might be utilized during the initial ED evaluation of stroke patients who are within the first three hours but who do not qualify for tPA use.

Background

Despite the presence of clinical trial data and phase IV data that has demonstrated the clinical efficacy and the clinical effectiveness of tPA in treating ischemic stroke patients, the Emergency Medicine community still actively debates the utility of this therapy in the ED. The initial NINDS results were published 11 years ago, demonstrating clinical efficacy. There have been over 12 publications demonstrating comparable results in the clinical setting suggesting clinical effectiveness. The NINDS data was reanalyzed, and in fact demonstrated comparable efficacy even when considering baseline stroke severity. So where does this leave the standard of care in 2006?

Even in institutions where tPA is utilized, there are patients for whom IV tPA use may not apply. What are the options for these early stroke symptom patients? Do they differ from the options that exist for stroke patients who are treated after the IV tPA three hour window? What should EM physicians do when confronted with an ischemic stroke patient who does not qualify for IV tPA despite arriving quickly following symptom onset?

Key Clinical Questions

What is the optimal use of tPA given its reported efficacy and clinical effectiveness?

If a stroke patient is within three hours from symptom onset, but does not qualify for tPA use, what other therapies might be considered in order to improve outcome?