



## ***Stroke Care 2006: Clinical Consensus and Opportunities***

### **Stroke Care After the 3 Hour Window for IV tPA use:**

### **What Diagnostic and Therapeutic Options?**

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#### **Learning Objectives**

- Discuss what diagnostic modalities should be used in the diagnosis of acute ischemic stroke who are treated greater than three hours after symptom onset.
- Determine the role of pharmacologic, interventional radiology, and operative techniques, in the management of ischemic stroke patients after the three hour tPA window.

#### **Background**

There have been numerous advances in the acute diagnosis of patients with acute ischemic stroke. The availability of CTA, MRI, MRA, as well as traditional cerebral angiography may allow the diagnosis for stroke to be made more accurately, and also may allow for therapeutic modalities to be used more effectively and efficiently. How have these new modalities changed the way in which we diagnose or should diagnose acute stroke patients in the ED, especially those who are being treated after the three hour IV tPA window?

Additionally, devices such as the mechanical clot removal device have been FDA approved and provide a unique and promising therapeutic modality for the treatment of acute ischemic stroke patients. However, how and when patients should be directed to this therapy, other mechanical therapies, pharmacologic interventions, or operative intervention remains uncertain. What should Emergency Medicine physicians know about these therapies so that they can appropriately obtain consultation and plan disposition for the ED ischemic stroke patients that they treat?

#### **Key Clinical Questions**

What are optimal diagnostic modalities when evaluating acute ischemic stroke patients who do not qualify for IV tPA because the three hour window has been exceeded?

What pharmacologic, interventional radiology, and operative techniques should be considered when managing stroke patients who present late after symptom onset?