The Diagnosis and Management of Acute Ischemic Stroke: New Frontiers in Managing ED Patients

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Learning Objectives

- Discuss the latest radiological modalities used in the diagnosis of acute ischemic stroke
- Determine the role of interventional radiology techniques in the management of acute ischemic stroke patients, including clot retrieval devices.
- Provide an update on treatment guidelines that direct the acute management of acute stroke patients in the ED.

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 manage or should manage acute stroke patients in the ED? 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 the acute ischemic stroke patient. However, how and when patients should be directed to this therapy remains uncertain.

In order to assess these potential diagnostic and treatment modalities, it is necessary to not only know which modalities exist, but also to understand the literature and guidelines that describe and direct their use.

Dr. Sloan will discuss the role of CTA, MRI, MRA, cerebral angiography, and other mechanical interventions in the ED diagnosis and management of acute ischemic stroke patients. He will also discuss the latest literature and guidelines that support the way in which stroke patients should be managed in the ED.

Key Clinical Questions

What are the available diagnostic modalities for the evaluation of the acute ischemic stroke patient?

What interventional radiological techniques should be considered when managing these stroke patients?

What literature and guidelines exist that direct the use of these newer diagnostic and therapeutic modalities in the ED management of acute stroke patients?