



## ***Optimizing ED Ischemic Stroke Patient Care***

### **Why must cranial CT and lumbar puncture both be performed in order to exclude the diagnosis of subarachnoid hemorrhage?**

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#### **Learning Objectives**

- Review the optimal way in which the clinical evaluation, diagnostic testing, and treatment of Emergency Department patients with acute cephalgia and suspected SAH can be conducted.
- Discuss the role of lumbar puncture in patients whose SAH risk is limited and in whom the initial non-contrast CT is negative for subarachnoid blood.

#### **Background**

One of the critical requirements of the emergency physician is to be able to efficiently diagnose and effectively treat patients who present to the Emergency Department with acute cephalgia and suspected SAH. This lecture will highlight the physical examination and diagnostic evaluation of these patients, including the need for CT neuroimaging and subsequent lumbar puncture.

This presentation will also address important issues such as what is to be considered a traumatic lumbar puncture, when a lumbar puncture might be deferred or need to be repeated, and what can be concluded from the fact that a patient's headache has resolved as a result of the ED interventions.

Lastly, a look at the ACEP clinical policy on the management of ED headache patients will be conducted in order to better understand how these ED patients might be optimally managed.

#### **Key Clinical Questions**

What is the optimal way in which Emergency Department patients with acute cephalgia and suspected SAH can be evaluated and treated based on current guidelines?

What is the role of lumbar puncture in patients whose SAH risk is limited and in whom the initial non-contrast CT is negative for subarachnoid blood?