

Clinical Policy: Critical Issues in the Evaluation and Management of Adult Patients Presenting to the Emergency Department With Acute Headache (Executive Summary)

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Clinical Policy Endorsed by the Emergency Nurses Association (July 31, 2019)

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risk-stratification strategies that reliably identify the need for emergent neuroimaging?

Background

This clinical policy from the American College of Emergency Physicians addresses key issues in the evaluation and management of adult patients presenting to the emergency department with acute headache. A writing subcommittee conducted a systematic review of the literature to derive evidence-based recommendations to answer the below critical questions. For each question a systemic literature search was performed, evidence was graded and synthesized, and recommendations were made based on the strength of the available data.

Critical Questions

1. **In the adult emergency department (ED) patient presenting with acute headache, are there**

Patient Management Recommendations

Level A recommendations. None specified.

Level B recommendations. Use the Ottawa Subarachnoid Hemorrhage Rule (≥ 40 years, complaint of neck pain or stiffness, witnessed loss of consciousness, onset with exertion, thunderclap headache, and limited neck flexion on examination) as a decision rule that has high sensitivity to rule out subarachnoid hemorrhage (SAH), but low specificity to rule in SAH, for patients presenting to the ED with a normal neurologic examination result and peak headache severity within 1 hour of onset of pain symptoms.

Although the presence of neck pain and stiffness on physical examination in ED patients with an acute

headache is strongly associated with SAH, do not use a single physical sign and/or symptom to rule out SAH.

Level C recommendations. None specified.

- In the adult ED patient treated for acute primary headache, are nonopioids preferred to opioid medications?**

Patient Management Recommendations

Level A recommendations. Preferentially use nonopioid medications in the treatment of acute primary headaches in ED patients.

Level B recommendations. None specified.

Level C recommendations. None specified.

- In the adult ED patient presenting with acute headache, does a normal noncontrast head computed tomography (CT) scan performed within 6 hours of headache onset preclude the need for further diagnostic workup for SAH**

Patient Management Recommendations

Level A recommendations. None specified.

Level B recommendations. Use a normal noncontrast head CT* performed within 6 hours of symptom onset in an ED headache patient with a normal neurologic examination, to rule out nontraumatic SAH.

Level C recommendations. None specified.

- In the adult ED patient who is still considered to be at risk for SAH after a negative noncontrast head CT, is computed tomography angiography**

(CTA) of the head as effective as lumbar puncture (LP) to safely rule out SAH?

Patient Management Recommendations

Level A recommendations. None specified.

Level B recommendations. None specified.

Level C recommendations. Perform LP or CTA to safely rule out SAH in the adult ED patient who is still considered to be at risk for SAH after a negative noncontrast head CT result.

Use shared decision making to select the best modality for each patient after weighing the potential for false-positive imaging and the pros and cons associated with LP.

Level A recommendations. Generally accepted principles for patient care that reflect a high degree of clinical certainty (eg, based on evidence from 1 or more Class of Evidence I or multiple Class of Evidence II studies).

Level B recommendations. Recommendations for patient care that may identify a particular strategy or range of strategies that reflect moderate clinical certainty (eg, based on evidence from 1 or more Class of Evidence II studies or strong consensus of Class of Evidence III studies).

Level C recommendations. Recommendations for patient care that are based on evidence from Class of Evidence III studies or, in the absence of adequate published literature, based on expert consensus. In instances in which consensus recommendations are made, “consensus” is placed in parentheses at the end of the recommendation.

*Minimum third-generation scanner.