Advanced Imaging Checklist: Headache February 12, 2010

Note: The scope of this advanced imaging checklist is limited to those situations most likely to have high variation and overuse. It is not intended to interfere with timely action in the setting of more urgent care (e.g., the ED) or in situations that require more acute clinical decision-making, such as with acute head injury.

I. CT/MRI for acute, recurrent headache or chronic, persistent headache in any healthcare setting

In general, patients with chronic headaches, or with acute exacerbations of their usual headache pattern, whether migraine or tension (muscle-contraction) headache, do not require advanced imaging. "Neuroimaging is not indicated in patients with a clear history of migraine, w/o red flag features for potential secondary headache and a normal neurological exam."[3]

Obtaining a neuroimaging study on a routine basis is not indicated in children with recurrent headaches and a normal neurological examination.[4]

- ☐ Unexplained new or previously unknown abnormal finding on neurological examination

II. **New onset, secondary headache (caused by another condition) in the outpatient setting (non-hospital, non-ER). MRI is generally indicated in these situations.**

- ☐ Focal neurological signs or symptoms or objective non-focal neurological signs, e.g., ataxia
- ☐ Cognitive disturbance, e.g., confusion, disorientation, pathological somnolence
- ☐ Patient >50 yrs
- ☐ Headache precipitated by physical exertion or Valsalva maneuver
- ☐ Patients with risk factors for cerebral venous thrombosis
  - ☐ Pregnancy or post-partum
  - ☐ Severe dehydration
- ☐ Fever or meningismus
- ☐ History or suspicion of HIV infection or immunological compromise
- ☐ History or suspicion of cancer

References

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- American College of Radiology. ACR Appropriateness Criteria®: Neurologic Imaging- headache. Available at: http://www.acr.org/SecondaryMainMenuCategories/quality_safety/app_criteria/pdf/ExpertPanelonNeurologicImaging/HeadacheDoc6.aspx
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