



Clinical Protocol: Headache

ORIGINAL EFFECTIVE DATE:  
05/24/2011

REVIEWED/REVISED DATE(S):  
06/18/2019

PREPARED BY: Joanne Calegari

APPROVED BY: Richard Powell, M.D.

## PROTOCOL OVERVIEW

This Clinical Protocol advises on guidelines, indications, and referral processes for headaches.

## INDICATIONS

### CLINICAL INDICATIONS FOR IMAGING

- CT scan, non-contrast
  - Indicated for ANY ONE of the following
    - Symptoms suggesting an ominous headache with a possibly more serious, underlying cause, as indicated by ANY ONE of the following:
      - First or worst headache of the patient's life, particularly if the onset was rapid
      - Suspected subarachnoid hemorrhage when ANY ONE of the following is present (without contrast):
        - Abrupt onset of severe headache
        - Headaches during exertion or sexual intercourse
        - Warning headache, i.e., a recent unusually severe headache with abrupt onset
      - A change in the frequency, severity, or clinical features of the headache attack from what the patient has commonly experienced
      - Onset of headache after 50 years of age
      - A new or progressive headache that persists for days
      - Precipitation of head pain with coughing, sneezing, or bending down
      - Systemic symptoms such as myalgia, fever, malaise, weight loss, scalp tenderness, or jaw claudication
      - Neurologic abnormalities
        - Focal neurologic symptoms
        - Abnormalities on neurologic examination
        - Confusion
        - Any impairment in the level of consciousness
      - Seizure disorder
      - History of cancer
  - Indicated for ANY ONE of the following:
    - Symptoms suggesting an ominous headache with a possibly more serious, underlying cause, as indicated by ANY ONE of the following:
      - First or worst headache of the patient's life, particularly if the onset was rapid
      - A change in the frequency, severity, or clinical features of the headache attack from what the patient has commonly experienced
      - Onset of headache after 50 years of age
      - A new or progressive headache that persists for days

- Precipitation of head pain with coughing, sneezing, or bending down
- Systemic symptoms such as myalgia, fever, malaise, weight loss, scalp tenderness, or jaw claudication
- ANY ONE of the following neurologic abnormalities:
  - Focal neurologic symptoms
  - Abnormalities on neurologic examination
  - Confusion
  - Any impairment in the level of consciousness
- Seizure disorder
- Constitutional symptoms: fever, weight loss, or cough
- History of cancer
- HIV positive patient, generally as preferred test

(NOTE that neuroimaging is usually not warranted in patients with migraine and normal neurologic examination).

### **CLINICAL INDICATIONS FOR REFERRAL**

- Refer to neurologist for ANY ONE of the following:
  - Diagnosis is unclear, atypical presentation
  - Unsatisfactory response to treatment, assistance needed
  - Focal neurologic findings or altered mental status
  - Change in headache pattern or neuropathic headache
  - Sudden onset of severe headache, with no previous history of headaches, age <10 or >50
  - Abnormal findings on CT scan or magnetic resonance imaging, congenital disorder, hydrocephalus, abnormal intracranial pressure

### **CLINICAL INDICATIONS FOR EMERGENCY EVALUATION**

- Emergency evaluation is indicated for ANY ONE of the following:
  - Suspected organic causes or findings requiring emergency evaluation for diagnosis and therapeutic intervention, including ANY ONE of the following
    - Subarachnoid or intracranial hemorrhage
    - Unruptured but threatening vascular malformation
    - Venous sinus thrombosis
    - Stroke or seizure
    - Increased intracranial pressure/abnormal funduscopic exam
    - Encephalitis, meningitis, brain abscess, space occupying lesion on image
    - Toxic or metabolic decompensation
    - Head trauma, HIV diagnosis, immunosuppression, cancer history
    - Malignant hypertension
    - Acute neurologic signs
    - Significant and persistent mental status change
  - Severe headache, including rebound headache, with intractable nausea and vomiting unresponsive to outpatient interventions, “thunderclap” headache, suggestion of giant cell arteritis, association with postural change or “worst headache of life

## **CITATION**

Milliman Care Guidelines, “Ambulatory Care”, 23<sup>rd</sup> Edition, 2/27/2019