## Outpatient Neuroimaging Requests for Headache in adults and children over 12 years of age

## Descriptor

Audit of compliance with NICE criteria for neuroimaging in those patients who present with headache.

## Background

Improved recognition of primary headaches will help the generalist clinician to manage headaches more effectively, allow better targeting of treatment and potentially improve quality of life and reduce unnecessary investigations for people with headache. Patients should not be referred for neuroimaging solely for reassurance and NICE have dedicated guidelines that state which headaches and headache characteristics should be considered for neuroimaging. Further, NICE quality standard reommendation [1.3.3] on imaging states 'For People diagnosed with tension‑type headache, migraine, cluster headache or medication overuse headache do not refer for neuroimaging solely for reassurance[1]'.

## The Cycle

### The Standard

Requests should meet 1 or more of the following:

In patients with symptoms/ signs of a secondary headache who develop any of the following

- Worsening headache with fever

- Sudden onset headache reaching maximum intensity within 5 minutes

- New neurological deficit

- New cognitive dysfunction

- Change in personality

- Impaired consciousness

- Recent (past 3 months) head trauma

- Headache triggered by cough, valsalva, sneeze or exercise

- Orthostatic headache

- Symptoms/ signs of GCA

- Symptoms/ signs of acute narrow angle glaucoma

- Substantial change in their headache

- Atypical aura

In patients with a new onset headache accompanied by any of the following:

- Compromised immunity

- Age <20 & history of malignancy

- History of malignancy known to metasstatise to brain

- Vomiting without obvious cause

- Features of raised ICP\* or other focal/ non-focal neurological symptoms

(\*Features of raised ICP (intracranial pressure) include vomiting, drowsiness, posture-related headache, headache with pulse-synchronous tinnitus)

### Target

100%

## Assess local practice

### Indicators

Percentage of outpatient neuroimaging requests for headache disorders which meet the NICE criteria

### Data items to be collected

1.  List of patients, aged over 12, who have been referred for outpatient neuroimaging with ‘headache’ in the clinical information

2.  Type of neuroimaging requested (CT/ MR)

3.  Referrer background

4.  Referrer compliance with NICE guidelines, and if met which criteria is met

5.  Neuroimaging results, including adverse findings and incidental findings

6.  Highlight the referrals that state or allude to the patient being worried or needing assurance

### Suggested number

100 patients

## Suggestions for change if target not met

1.  Discuss audit results with local radiologists and if possible the referring clinicians.

2.  Identify the patients in which the NICE criteria were not met and the outcome of their imaging.

3.  Decide whether further education for the referrers is required and/or a letter template that states the request for outpatient neuroimaging does not meet the NICE guidelines, which would accompany a declined request.

4.  Further notes should be made of referrals that state or allude to the patient being worried or needs assurance, as there is a clear statement from NICE saying this is not an indication to request neuroimaging. This can be also discussed at a local level and whether a separate declined request letter template needs to be written.

## Resources

RIS access

Data collection: 5 - 6 hours

Data analysis: 2 - 3 hours

Report writing: 2 – 3 hours

## References

1. National Institute for Health and Clinical Excellence. Nice Clinical Guideline 150.  Headaches in over 12s : Diagnosis and Management.  London 2015. Updated 2021 http://www.nice.org.uk/guidance/cg150 [last accessed 23 August 2023]

## Editors Comments

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