

Pediatric Migraine Without Aura: Proposed Diagnostic Criteria



A. At least 5 attacks fulfilling B-D

B. Headache attack lasting 30 minutes to 48 hours

C. Headache has at least 2 of the following:

1. Bilateral (frontal/temporal) or unilateral location
2. Pulsating quality
3. Moderate to severe intensity
4. Aggravation by routine physical activity

D. During headache, at least 1 of the following:

1. Nausea and/or vomiting
2. Photophobia and phonophobia

Winner P et al. *Headache* 1997; 37:545-548.

Cluster headache is a very severe, strictly unilateral headache of relatively short duration, 15 minutes to 3 hours. The pain is usually felt in and around the eye but may radiate to the temple and/or maxilla. A few patients will describe pain affecting most of one side of the head. Attacks almost always occur on the same side, never switching sides during an attack, and are accompanied by at least one of the autonomic symptoms listed. The name “cluster” alludes to the typical pattern of multiple daily attacks that occur in clusters for a period of several weeks, followed by extended headache-free remissions that may last months or even years.

Pediatric vs Adult Migraine



Pediatric

- 1-72 hours duration
- unilateral or bilateral (frontal/temporal)
- younger children often cannot describe pain quality/intensity; otherwise similar to adults
- comorbidity: motion sickness (49% of patients) [Cephalalgia 12:238-243, 1992]

Adult

- 4-72 hours duration
- typically unilateral
- pain intensity (moderate/severe) and quality (pulsatile) included in diagnostic criteria

Many cluster headache patients report that their attacks come at predictable times of the day, often late at night, and frequently disrupting sleep. Cluster has in fact been referred to as the “alarm clock” headache because of the day-to-day regularity and the frequent nocturnal attacks. Many patients can also predict the seasonal onset of an active bout, and if so, this patterning offers an opportunity to begin prophylactic treatment in anticipation of an active cluster period. Some patients may note onset around the winter and summer solstices; others may be triggered by the change from standard to daylight savings time and back again. In the example shown, the pattern is less neatly defined but is sufficiently striking to recommend regular initiation of a prophylactic regimen in early August.

Prevalence of Pediatric Migraine



- Reported prevalence rates range from 5.9%- 37.7%.
[Aromaa et al. Neurology 1998; 50:1729-36]
- In 2165 Scottish children ages 5-15, prevalence of migraine was 10.6% (95% CI: 9.1 to 12.3)
[Abu-Arefeh I et al. BMJ 1994;309:765-9]
- In 538 Brazilian students ages 10-18, prevalence of migraine was 9.9% [Barea LM et al. Cephalalgia 1996;16:545-9]
- Among Finnish children age 7, prevalence of migraine increased from 1.9% 1974 to 5.7% in 1992 [Sillanpaa M et al. Headache 1996; 36:466-70]

About 10% to 15% of patients have a chronic form of cluster headache, defined as the absence of remission periods lasting more than 14 days over a period of at least one year. Of these, the majority begin with an episodic pattern in which the active bouts gradually increase in duration until attacks occur on a daily or near-daily basis. A small minority of patients have an unremitting chronic pattern from the outset, and these patients require a careful workup, including an MRI, to rule out an intracranial lesion. Chronic cluster that is unremitting from onset is also known as *primary* chronic cluster headache, in contrast to chronic cluster developing from the episodic form, which is called *secondary* chronic cluster headache.