

Red Flags

- Age of presentation
- Early morning headaches or associated symptoms
- Worsening with straining
- Explosive new onset
- Mood, mental status, or school performance change
- Steady progressive pattern
- Underlying neurocutaneous syndrome or systemic illness
- Additional neurological issues (seizures)

Neurologic Features: Features of Secondary HA

- ❖ Papilledema
 - ❖ Diplopia
 - ❖ Hemiparesis
 - ❖ Ataxia
 - ❖ Abnormal Reflexes
- 99% of children with "bad stuff" have at least 1 and 50% have all.

Historical Features Primary vs. Secondary HA

Historical Features	Primary HA	Secondary HA
Length of illness	Chronic, > 6mo	Acute, < 6mo
Pattern	Recurrent or Daily	Progressive
Location	Frontal, Lateral	Posterior
Quality	Throbbing, Pressure	Pressure
Time of day	Anytime	Early AM (4-7 AM)
Frequency / Duration	Vary / Hrs-Days	Constant
Nausea / Vomiting	Nausea >> Vomiting	Vomiting
Visual aura / diplopia	Aura	Diplopia
Photo / phonophobia	+++	--

Red flags

Headache

Primary

Tension type
Headache

10 or more lifetime headaches between 30 min to 7 days in duration

Any 2 of the following 4:

- ❖ Bilateral location
- ❖ Pressure quality pain
- ❖ Mild to Moderate intensity
- ❖ Not aggravated by activity

Absence of:

- ❖ Nausea and/or vomiting
- ❖ Photophobia and/or photophobia

Management:

- ❖ OTC agents
- ❖ Integrative Therapies
- ❖ Relaxation
- ❖ Cognitive Behavioral Therapy
- ❖ Acupuncture

5 or more lifetime headache attacks between 2-72 hr in duration

Any 2 of the following 4:

- ❖ Bilateral
- ❖ Throbbing or pulsatile pain
- ❖ Moderate or severe intensity
- ❖ Aggravated by routine physical activity

Any 1 of the following 2:

- ❖ Nausea and/or vomiting
- ❖ Photophobia and/or phonophobia

- Genetics
- Female
- Sensitive brain
- Early onset
- Other pain or chronic conditions

Childhood Migraine
w/o Aura

Migraine
Pathophysiology

Bad Luck

Modifiable Risks

- Sleep
- Diet / hydration
- Weight
- Exercise
- Stress

Change in headache quality or frequency

Co-existence of seizures

Recent onset of severe headache

Abnormal neurologic examination

Neuroimaging
IF: