

# Pediatric Migraine Treatment Options and Further Evaluation

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This guide will walk you through the red flags, signs of when to image, lifestyle changes and treatment options for the pediatric migraine patient.

## Red Flags

### History

- Worst headache of their life
- Positional headache
- During sleep or early morning especially with emesis
- Atypical or change in headache pattern
- Intensified by exertion
- Headache associated with neurological deficit
- Acute vision loss or diplopia
- Sudden decline in school performance
- Seizure
- Personality change

### Neurological Exam

- Meningeal signs, fever, rigors
- Signs of increased intracranial pressure
- Neurocutaneous findings
- Altered mental status
- Focal neurological findings
- Papilledema
- Nystagmus
- Cranial nerve abnormality
- Hemiplegia
- Ataxia

## When to Image

- Signs of increased intracranial pressure
- Abnormal neurological assessment
- Severe/abrupt headache (thunderclap)
- Change in headache pattern (increasing frequency or severity)
- Does not meet criteria for migraine or tension headache
- Not responding to daily or acute medications
- Infection and/or trauma



## Lifestyle Goals

### Goal hydration

- Ounces/day = weight in pounds
- Max 100 ounces/day

### Adequate sleep (within 2 hours variability)

- Children 10-12 hours and teenagers 9 hours

### Avoid possible food triggers

- Caffeine, cheese, chocolate, dairy, smoked foods, sausage, hotdogs, bacon, vinegar, red meat, pepperoni, bologna, deli meats, food with MSG (nuts, soy sauce)

### Be aware of other possible triggers

- Stress, intense emotions, weather changes, strong odors/fumes, loud noise, over-exertion, travel, medications, hormone changes (menstrual cycles)



## When to Refer

- Red Flags in History and/or Exam
- Significant Abnormality on Imaging
- Not responding to daily or acute medications
- Younger than 5 years old

## Acute Headache Treatment

**Step 1:** Simple analgesic (Acetaminophen, NSAID) and/or electrolyte fluid

**Step 2:** Simple analgesic and or an anti-emetic

**Step 3:** Triptan

### Key for Success:

- Treat Early
- Educate family on Medication Overuse Headache (avoid more than two treatment days per week)
- Headache log: including date, time, situation and treatment

## Rule of 2s:

- Re-dose in 2 hours, if needed
- Limit 2 doses per day
- Limit 2 treatment days per week

**Side Effects:** flu-like symptoms, tightness in chest/throat/jaw

**Contraindications:** uncontrolled HTN, arrhythmia, TIAs or history of stroke, pregnancy, ischemic heart disease, coronary vasospasm (including Prinzmetal's), multiple risk factors for CAD, hemiplegic migraine

	Time to onset (hrs)	Half Life (hrs)	Preparations and Dosing
<b>Fast Active Triptans</b>			
Sumatriptan	1.5	2-2.5	Tab: 1mg/kg/dose, 25mg (<50kg), 50mg (>50kg), 100mg  Nasal Spray: 5mg (<50kg, <9yrs), 10mg (>10-11 yrs), 20mg (>50kg, >12yrs)
Zolmitriptan*	2	2.5-3	Regular/ZMT: 2.5mg (<12yrs), 5mg (>12 yrs)  Nasal Spray: 5mg (>12 yrs)
Rizatriptan*	1.2-2.5	2-3	Regular ODT: 5mg (<40kg), 10mg (>40kg)
Almotriptan*	1.4-3.8	3.2-3.7	Tab: 6.25mg or 12.5mg or 25mg (>50kg)
Eletriptan	1-2	4-7	Tab: 20mg or 40mg (>50kg)
<b>Slow Active Triptans</b>			
Naratriptan	2-3	5-6	Tab: 1mg, 2.5mg
Frovatriptan	2-4	24-30	Tab: 2.5mg

\*FDA approved medication for children