

Migraine/Headache Pathway ED

- Inclusion Criteria**
- Age 6 or older with primary headache (tension or migraine)
- Exclusion Criteria**
- Less than 6 years
 - Secondary headache (i.e. HTN crisis, meningoenephalitis)
 - Positive pregnancy test

- Triptan Contraindications**
- History of ischemic vascular disease
 - Accessory conduction pathway disorder
 - Hemiplegic migraine
 - Migraine with brainstem aura that does not respond to other treatments

- Consider imaging and/or labs if Red Flags present:**
- Young age (< 6 yrs)
 - New onset or worsening headache
 - Postural headache
 - Posteriorly located headache
 - Focal neurologic deficit
 - Focal weakness (Rapid MRI with perfusion)
 - Altered mental status
 - Fever
 - Seizures
 - Night time awakening
 - Vomiting
 - Early morning headache and/or vomiting
 - Neurocutaneous stigmata
 - Worsening of headache with cough or Valsalva
 - Papilledema or visual field defects
 - History of systemic symptoms or illness (e.g.)
 - Lupus - fatigue, fever, joint pain, rash on face
 - Sickle Cell Disease
 - Illicit drug use

Patient arrival with primary headache
Migraine Diagnosis

- At least 5 HA over last year
- Lasting 2-72 hrs when untreated
- At least 2 of 4 features: pulsatile quality, unilateral, worsening with activity or activity limiting, moderate to severe in intensity

- Review Red Flags
- Provide Nonpharmacologic Interventions
 - Quiet, dark environment
 - No electronics
 - Rest
 - Warm/cold packs

Urine Pregnancy test (post menstrual females only)

Is patient pregnant?

Yes → Manage off pathway

No → Can patient tolerate PO?

- Can patient tolerate PO?
- Yes →
- PO rizatriptan or SubQ sumatriptan (if not contraindicated)
- Consider:
- Oral rehydration
 - PO ondansetron
 - PO caffeine
 - PO acetaminophen (if not given in the last 6 hours)

Headache improved?

Based on ANY of the following:

- An improvement in pain score
 - A functional improvement
- Patient reported subjective improvement
 - Complete resolution of pain
 - Return to baseline pain level

No → Start PIV, NS bolus 20 mL/kg, IV ketorolac (if > 6H since last NSAID), IV diphenhydramine (prior to antiemetic), Consider SubQ triptan (if not contraindicated or already given)

- Start PIV
 - NS bolus 20 mL/kg
 - IV ketorolac (if > 6H since last NSAID)
 - IV diphenhydramine (prior to antiemetic)
 - Consider SubQ triptan (if not contraindicated or already given)
- Anti-emetic (if not already given PO)**
- IV metoclopramide OR
 - IV ondansetron OR
 - IV prochlorperazine

Headache improved?

Based on ANY of the following:

- An improvement in pain score
 - A functional improvement
- Patient reported subjective improvement
 - Complete resolution of pain
 - Return to baseline pain level

No → Mag Sulfate 30mg/kg IV (max 2000 mg), Administer over 30 minutes, Consider 2nd fluid bolus of 20 mL/kg

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- Administer over 30 minutes
- Consider 2nd fluid bolus of 20 mL/kg

Headache improved?

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No → Give Either

- Give Either**
- Dexamethasone 0.6 mg/kg IV (MAX 16 mg) if not given steroids for headache in the past 7 days
- OR
- Valproate Sodium 15 mg/kg (max 1000 mg) IV over 30-60 mins (do not administer if pregnant)

Headache improved?

Based on ANY of the following:

- An improvement in pain score
 - A functional improvement
- Patient reported subjective improvement
 - Complete resolution of pain
 - Return to baseline pain level

No → Admit

Discharge Patient

- Prescribe at least 1 rescue treatment option appropriate for their level of migraine severity. Consider Triptan (if not contraindicated) with NSAID. PO Triptan preferred.
- Use of headache log reviewed with patient/family.
- If given IV valproic acid, prescribe tablet or liquid valproic acid: 7.5 mg/kg/dose BID (max 250 mg/dose to start) for 2 weeks
- Follow up with PCP or Neurology as needed