CLINICAL PATHWAY:

Acute Management of Migraine and Migraine-Like Headache

THIS PATHWAY
SERVES AS A GUIDE
AND DOES NOT
REPLACE CLINICAL
HIDGMENT

Inclusion Criteria: Patients age ≥6 years presenting with headache (HA) lasting 2-72 hours and HA pain score ≥6 with at least one of the following characteristics:
(1) non-occipital location; (2) pulsating quality; or (3) aggravated by or causing avoidance of routine physical activity

AND at least one of the following: nausea, vomiting, photophobia, phonophobia.

Patients must have a previous similarly described headache with relief from comparable medications [normal saline bolus, non-steroidal anti-inflammatory drug (NSAID), and/or anti-dopaminergic agent]

Exclusion Criteria: Age <6 years, abnormal neurologic exam, pregnancy, cardiovascular disease, uncontrolled hypertension, intracranial shunt, fever, malignancy, closed head injury/trauma within 24 hours, concussion within 2 months, seizure, concern for increased intracranial pressure/Cushing Triad, sudden-onset headache reaching maximum intensity within 5 minutes.

Initial Evaluation

Nursing Interventions to occur immediately upon rooming patient:

- Determine headache (HA) pain score using Wong-Baker FACES Pain Rating Scale or Numeric Pain Rating Scale¹
- Lights and TV off; encourage not using electronic devices
- Determine and document last dose of NSAID and acetaminophen
- Determine and document last dose of any other medications given to abort headache
- Obtain POCT urine b-HCG for all females age 11 or greater

¹ Headache Pain Score

- Use Wong-Baker FACES Pain Rating Scale or Numeric Pain Rating Scale
- Evaluate HA pain score 45 mins after completion of each intervention
- Discharge goal: repeat HA pain score is ≤ 50% of the *initial* pain

Initial Management Medications:

- If ≥12 years old **and** not administered in past 2 hours **and** no contraindications (**Appendix A**):

 Sumatriptan IN 20 mg x1
- If dose appropriate NSAID has not been given with the last 6 hours:
 - Add Ibuprofen PO 10 mg/kg, max 600 mg, if able to tolerate PO
 - May defer if patient reports headache refractory to appropriate dosed NSAID at home during this headache episode

Other Considerations:

Oral rehydration

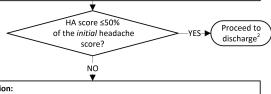
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Reassess headache score 45 minutes after completion of above interventions



Prior to PIV placement, consider bedside sphenopalatine block with lidocaine via nasal atomizer; based on patient and care team comfort level. Administer a max of 1 mL of 4% lidocaine without epinephrine via nasal atomizer: if unilateral headache, full 1 mL to the ipsilateral nare; if headache is bilateral, 0.5 mL to each nare

- Access: Place PIV
- Medications/Hydration:
 - o **NS bolus IV** 20 mL/kg (max 1 L) x 1
 - o Prochlorperazine IV 0.15 mg/kg (max 10 mg) x1
 - Consider diphenhydramine PO 1 mg/kg (max 50 mg/dose) to prevent extrapyramidal symptoms (dystonia, akathisia, tardive dyskinesia, slurred speech)
 - If patient develops extrapyramidal symptoms, administer diphenhydramine IV 1 mg/kg (max 50 mg/dose)
- o 6 hours after last NSAID: **Ketorolac IV** 0.5 mg/kg (max 15-30 mg) x1
- Assessment: Reassess headache score¹ 45 minutes post above interventions



Medication/Hydration:

- Repeat NS bolus 20 mL/kg IV x 1 (max 1L)
- Magnesium sulfate IV 30 mg/kg (max 2g)

Assessment:

Reassess headache score¹ 45 minutes after completion of above interventions



Admit to Med-Surg Unit

Consult Neurology to determine to which service patient should be admitted

²DISCHARGE:

Discharge Criteria:

- Pain from headache ≤50% of the *initial* HA pain score
- Tolerating PO

Discharge Instructions:

- For ≥12 years old: If patient improved with IN sumatriptan, consider discharging with 3 doses of oral sumatriptan: 50 mg/dose (may be repeated once during a 24 hour period, 2 hrs after initial dose).
- Establish plan for patient to follow-up with PCP within 48 hrs
- Referral to Psychology if:
 - O Symptoms ongoing for 3 or more months
 - Symptoms consistently preventing participation in usual life activities (such as school)
- Referral to Neurology if:
 - Symptoms ongoing for 3 or more months despite pediatrician follow-up
 - Concern for alternative diagnosis
 - Suspected migraine with focal findings
 - Suspected/established coexisting primary neurologic issue (i.e. epilepsy)
- Referral to Pain Team Headache Clinic if:
 - Symptoms ongoing for 3 or more months, particularly if patient has history of chronic pain or if patient would like to discuss the possibility of nerve blocks, trigger point injections, and/or onabotulinumtoxin A injections as part of their management plan (however, not all patients are eligible for this)
 - If patient is 22 years or older:
 - Advise PCP referral to Adult Headache Center at Hartford Healthcare or Uconn Neurology



CLINICAL PATHWAY:

Acute Management of Migraine and Migraine-Like Headache Appendix A: Contraindications to Sumatriptan

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Appendix A: Contraindications to Sumatriptan

- Sumatriptan administered < 2 hours prior
- Already received max daily dose of sumatriptan

Weight (kg)	Max Dose of IN Sumatriptan per 24 hours
	(mg)
<less 30="" kg<="" td="" than=""><td>10 mg</td></less>	10 mg
30-39.9 kg	20 mg
40 kg and above	40 mg

- Any triptan received within 2 hours or they have already received the max 24 hour dosage of any triptan
- Use of ergotamine derivatives within the last 24 hours
- Ischemic heart disease
- Prinzmetal's angina
- Peripheral vascular disease
- Uncontrolled HTN
- Stroke
- Severe hepatic impairment
- Pregnancy
- History of organ transplant
- Use of MOA-I in past 2 weeks

