Addendum 2:
Tips & Tricks for Diagnosing and Management

Migraine

Over 1 Billion people worldwide suffer from migraine.

Headache disorders, such as migraine, are a common reason for presentation to the emergency department and inpatient setting. Please share this sheet for discussion at your site about common questions and controversies around the treatment and diagnosis of migraine. Please reach out to DCMC educational champions to ensure your site is ready for the new ED and inpatient treatment pathways. We are here to help with education and provide a more seamless mechanism to ensure safe and expedited transfers to DCMC when needed.

TOP TIPS

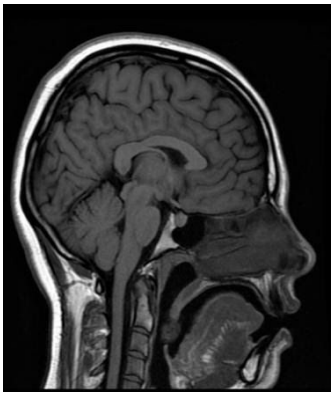
- Obtain a detailed history.
- Be aware of the indications for headache neuroimaging, e.g. seizure, focal neuro deficits.
- If imaging is needed, brain MRI is almost always preferred over a head CT.
- Do not treat a primary headache with opioids and barbiturates.
- Migraine is a brain disorder caused by elevations in CGRP & is not a vascular disorder.

Diagnosis

- Headache attacks lasting 2 -72 hours (untreated or unsuccessfully treated)
- Headache has at least 2 to 4 characteristics:
  - Unilateral location (typically bilateral)
  - Pulsating quality
  - Moderate or severe pain intensity
  - Aggravation/avoidance of routine activity (e.g. walking)
- During headache at least one of the following:
  - Nausea and/or vomiting
  - Light and sound sensitivity (can be inferred from their behavior)
- Not better accounted for by another disorder.

Discharge planning

- Consider a 3-day naproxen bridge
- Arrange follow up with neurology
- Provide headache education:
  - Sleep, adequate nutrition and hydration, exercise
  - How to avoid medication overuse
  - Recommend tracking headaches
- Discuss reasons to return to the ED
  - Headache regularly awakens from sleep, vomiting multiple times during a headache, dehydration, confusion, or significant worsening of headache features or pattern



Brain MRI is recommended over CT

NO indication for opioids or barbiturates

Addendum 3:
Medication and Dosing

Enteral Medications

- Acetaminophen 15 mg/kg PO (max 1 g)
- Ibuprofen 10 mg/kg PO (max 800 mg)
- Naproxen 10 mg/kg PO (max 660 mg)
- Ondansetron 0.15 mg/kg PO (max 8 mg)
- Diphenhydramine 0.5 mg/kg PO (max 50 mg)

IV Medications

- Acetaminophen 15 mg/kg IV (max 1 g)
- ketorolac 0.5 mg/kg PO (max 30 mg)
- prochlorperazine 0.15 mg/kg IV (max 10 mg)
- Ondansetron 0.15 mg/kg IV (max 8 mg)
- Diphenhydramine 0.5 mg/kg IV (max 50 mg)
- Normal saline bolus 20 ml/kg IV (max 1 L)
- Valproic acid 20 mg/kg IV (max 1,000 mg)

Triptans

- Rizatriptan tab or MLT (6-17 yo)
  - 20-39 kg = 5 mg PO
  - 40 kg = 10 mg PO
- Zolmitriptan nasal spray (12-17 yo)
  - 20-39 kg = 2.5 mg
  - 40 kg = 5 mg
- Sumatriptan PO
  - 40 kg = 25 mg PO
  - 40 kg = 50-100 mg PO
- Sumatriptan nasal spray
  - 20-39 kg = 10 mg
  - 40 kg = 20 mg

***Contraindicated in CV dz, stroke, or pregnancy

Anticipatory Guidance for Families

- Explain expected course
- Encourage good sleep hygiene, a well-balanced diet, sufficient hydration and regular exercise[1]
- Educate on medication overuse
  - The excessive use of symptomatic headache medicines, most commonly simple analgesics, can cause MOH in susceptible patients and has been well described in patients with primary headache disorders. Medication overuse can be a contributing factor in headache chronicity in 20–30% of children and adolescents with chronic daily headache [2]
- Recommend follow up
- Reasons to return: significant worsening, recurrent vomiting, confusion, new neurologic symptoms