Addendum 1: Frequently Asked Questions about Migraine

The following is a brief FAQ of common questions that come up regarding treatment of primary headache disorders such as migraine. This document is meant to spark discussion amongst your departments to help staff set standard expectations and language around treatment. The answers below were approved and created in a multidisciplinary fashion with Neurology, the ED, PCRS, PICU, Pharmacy and Nursing.

How common is migraine?

- Approximately 1 billion people worldwide suffer from migraine
- Prior to puberty, girls and boys have a similar migraine prevalence. After puberty, young women are 3 times more likely to develop migraine[7]
- 15% of the population has migraine. It can start as early as 2-3 years of age.

How disabling is migraine?

- It is the 2nd leading cause of years lost due to disability[5]
- Considering all conditions and disorders, migraine is the #1 cause of disability in people ages 15-49 years[5]

What are the symptoms of migraine?

- Typical symptoms include a bilateral headache with associated potential sensitivities to light, sound, smell, movement and may have associated nausea, vomiting, fatigue and dizziness.
- The diagnosis of migraine is made clinically.

What are the diagnostic criteria for migraine?

- Headache attacks lasting 2 -72 hours (untreated or unsuccessfully treated)
- Headache has at least 2/4 characteristics:
    - unilateral location (typically bilateral)
    - pulsating quality
    - moderate or severe pain intensity
    - aggravation/avoidance of routine activity (e.g. walking or climbing stairs)
- 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.

How do we work up migraine?

- **Migraine does not require a head CT, brain MRI or EEG.**
- Work up such as a brain MRI and/or lumbar puncture is only indicated for atypical or worrisome signs or symptoms such as: an abnormal neurologic exam, if there is onset of sudden severe

headache, a significant change to the headache pattern, has associated seizure, confusion, or if there are any major vital sign abnormalities.

What is the cause of migraine?

- Migraine is a genetic, brain (neurologic) disorder.
- Migraine is not a vascular disorder.
- Elevations in pain-specific proteins such as calcitonin gene-related peptide (CGRP) have been shown to cause migraine. There are a range of treatment strategies that reduce CGRP.

What are common migraine triggers?

- Bright lights, loud sounds, strong smells, dehydration, weather change, meal skipping, stress, illness, and poor sleep.
- Certain foods may be craved prior to a migraine onset and some people associate that food with triggering a migraine.
    - Food triggers such as gluten and chocolate are fairly uncommon but things such as excessive caffeine consumption, monosodium glutamate (MSG) and nitrates from cured meats are more common.

How do we treat primary headache disorders, such as migraine, in the Emergency Dept or hospital?

- An algorithm has been developed that triages patients in the emergency department depending based on the severity of the pain. For mild headache, patients will be offered simple analgesics such as naproxen with the potential for adding in a triptan if needed. For moderate to severe headache, patients will be offered an IV migraine cocktail which typically includes prochlorperazine (Compazine), ketorolac (Toradol), and IV fluids.
- A small percentage of these patients will require inpatient admission for management of their primary headache disorder. Order sets for these patients have also been updated.
- Expectations of treatment should be discussed with families. Treatment may not always eliminate pain and it may return if it is a chronic headache disorder. The goal of treatment is to reduce the pain burden to improve their functioning.
- Prevention is the most effective way to manage migraine. Patients should be referred back to their primary doctor and a neurologist to address this.

Families and children should be properly educated on:

- Sleep – duration of sleep depends on age: children 6 to 12 years of age need 9 to 12 hours per night. Teenagers need 8 to 10 hours per night. Screen time should be avoided 1 hour before bed
- Hydration – for a typical day, 1 ounce per kilogram of water is recommended. Most teens should consume approximately 64 oz or 2 L of water per day.
- Exercise – regular exercise has been shown to reduce migraine frequency, intensity, and duration and improves quality of life.[6]
- Nutrition – advising regular and balanced meals throughout the day.
- Keeping track of headaches through a headache diary or app such as migraine buddy.
- Avoid overusing treatments such as ibuprofen (Advil, Motrin) and acetaminophen (Tylenol). They should be limited to using no more than 14 days per month.[7]

- Reasons to return for evaluation: headache regularly awakens from sleep, vomiting multiple times during a headache, dehydration, confusion, or significant worsening of headache features or pattern

What are other helpful resources that I can use for management and patient education?

Please refer to the DCMC Inpatient and Emergency Department Guidelines for more details on local practice recommendations.

The American Migraine Foundation is also an excellent source of information for patients and families.

*** Post the CHAT and DCMC family education handouts for migraine in your unit