



## BC Children's Hospital Comprehensive Migraine Headache Discharge Guideline

### **Definition of Migraine in children:<sup>1</sup>**

- \* A Migraine is a headache that:
  - Lasts 2-72 hours in children (4-72 hrs for adults)
  - Has at least TWO of the following:
    - Pain is one-sided or both sides in children
    - Pulsating
    - Moderate or severe pain
    - Aggravated by or causing avoidance of routine physical activity
  - During a headache there is at least ONE of:
    - Nausea and/or vomiting
    - Light and noise sensitivity (in children, this can be suggested by behavior)

### **Concepts of Migraine Management:**

To manage migraine headaches, each patient needs:

1) A Migraine Prevention Strategy

AND

2) A Migraine Treatment Strategy

### Migraine Prevention Strategy

- \* **Fluid**
  - Drink 6 cups (1.5L) of water per day
  - Remove (or reduce) caffeine from your diet
- \* **Sleep Hygiene:**
  - Maintain a regular sleep pattern daily
- \* **Diet and Exercise:**
  - Eat three meals per day, and do not skip meals
  - Eat protein for breakfast
  - Maintain a healthy body weight
  - Exercise for 30 minutes a day
- \* **Mind and Body:**
  - Stress and anxiety can worsen migraines
  - Migraines can cause physical stress, mental stress and change in mood and behavior
  - Biobehavioural techniques (relaxation training, biofeedback, cognitive behavioural therapy, and stress management) are helpful for migraine
    - <http://keltymentalhealth.ca>
    - <http://mindfulnessforteens.com>
    - <http://www.Dawnbuse.com>
- \* **Triggers:**
  - Recognize and avoid obvious migraine triggers
- \* **Supplements, taken for 2-3 months, may benefit children with migraine (Use as directed by your physician. Can try one at a time OR all three):<sup>2</sup>**
  - Magnesium Citrate 9mg/kg/day divided twice a day (max 600mg/day):
    - \_\_\_\_\_
  - Coenzyme Q10 1-3mg/kg/day (max 150mg/d):
    - \_\_\_\_\_
  - Vitamin B2 (Riboflavin) 200-400mg/day:
    - \_\_\_\_\_

## Migraine Treatment Strategy

- \* Acute medications include:
  - Ibuprofen 10mg/kg (Max of 600mg)
  - Acetaminophen 15mg/kg (Max 1000mg)
  - If failure of Ibuprofen and/or Acetaminophen, try Naproxen Sodium 7mg/kg (Max 550mg)
    - \*Do NOT give within 6 hours of Ibuprofen\*
- \* Give acute medication at the START of headache pain:
  - Acute medication works BEST if taken EARLY and is LESS effective the longer you wait to treat
  - Delay in giving acute medication increases the risk of a developing a prolonged headache
- \* Teach your child how to talk about their headache pain and tell someone when it STARTS
- \* Acute medication must be READILY available at all times (including at home and at school)
- \* Acute medication should NOT be used more than 3 days a week in order to prevent MEDICATION OVERUSE headache (worsening of headache pain)
- \* There is an INDIVIDUAL response to acute medication. Learn what treatment plan is BEST for you/your child

### References:

- 1) Headache Classification Committee of the International Headache Society (IHS). The International Classification of Headache Disorders, 3<sup>rd</sup> edition (beta version). *Cephalalgia*. 2013;33(9):628-808
- 2) Orr SL, Venkateswaran S. Nutraceuticals in the prophylaxis of pediatric migraine: Evidence-based review and recommendations. *Cephalalgia*. 2014;34(8):568-583
- 3) Hicks C, von Baeyer CL, Spafford P, van Korlaar I, Goodenough B. The Faces Pain Scale-Revised: toward a common metric in pediatric pain measurement. *Pain* 2001 (93): 173-183

### Guideline Development:

Faber A<sup>1</sup>, Meckler G<sup>2</sup>, Yonker M<sup>3</sup>, Ngo C<sup>4</sup>, Selby K<sup>5</sup>, Dilli E<sup>6</sup>. October 7, 2015.

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## An Individualized Acute Migraine Treatment Plan:

Date (mm/dd/yyyy): \_\_\_\_\_

Name of Child: \_\_\_\_\_

Weight of Child: \_\_\_\_\_ kg

At the START of the headache, take:

Option 1: \_\_\_\_\_

And/Or Option 2: \_\_\_\_\_

And/Or Option 3: \_\_\_\_\_

And/Or Option 4: \_\_\_\_\_

**\*\*Do not use acute medication more than 3 days a week\*\***

### **Education:**

- \* A headache diary teaches you about your headaches
  - Visit <http://www.headachenetwork.ca>
- \* Teach your child how to TALK about their headache pain with the following PAIN SCORE tool<sup>3</sup>



“Theses faces show how much something can hurt. This face (point to the left-most-face) shows no pain. The faces show more and more pain (point to each from left to right) up to this one (point to the right-most-face) – it shows very much pain. Point to the face that shows how much you hurt (right now)”

- \* Score the chosen face 0, 2, 4, 6, 8, or 10, counting from left to right, so “0” = “no pain” and “10” = “very much pain”. Do not use words like “happy” and “sad”. This scale measures how much children feel inside, not how the face looks.