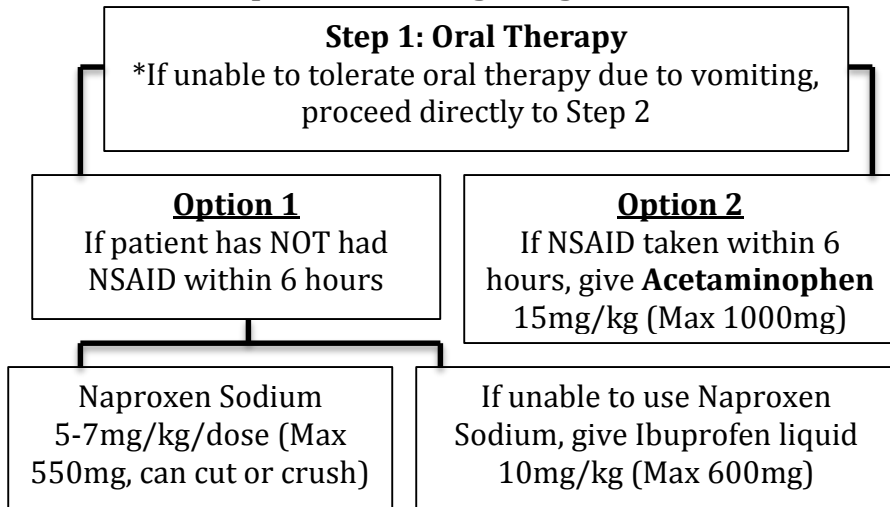




**BC Children's Hospital Comprehensive Treatment Guideline for Migraine Headache**

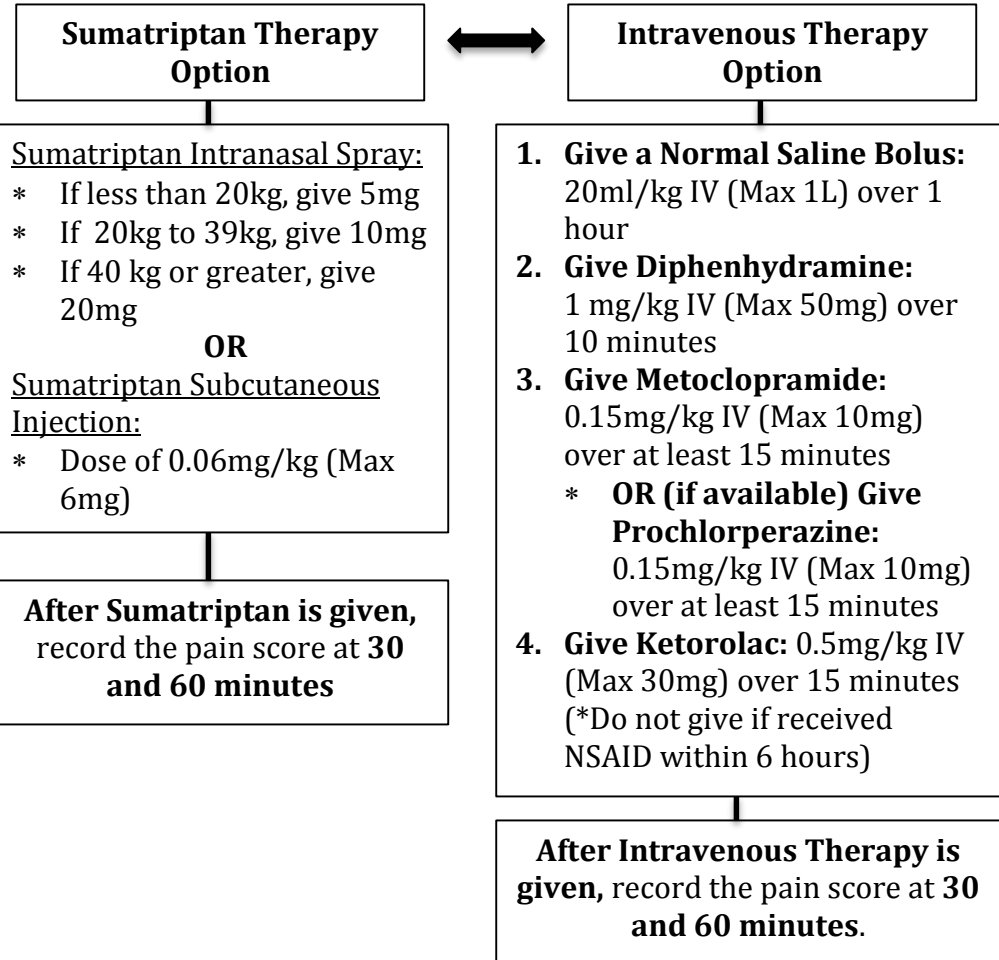
- \* Initiate guideline after secondary causes of headache have been ruled out.
- \* The goal of treatment is to reduce pain score intensity to less than 4/10.
- \* Document: time of headache onset, time and dose/type of medication (s) already given, presence of nausea or vomiting
- \* Document the pre-treatment pain score.
- \* Initiate guideline if the answer is YES to these 3 questions:
  1. Does the patient have probable migraine, status migrainosus (see appendix for criteria) or have pre-existing diagnosis of migraine headache?
  2. Is the patient 6 years of age or older?
  3. Is the neurological examination normal or unchanged from baseline?
- \* **See reverse for medication contraindications, side effects and cautions prior to starting this guideline**



**After Step 1, record the pain score at 60 minutes. If no improvement in pain score to less than 4/10 proceed to Step 2.**

**Step 2: Sumatriptan Option OR Intravenous Therapy Option**

**Provider to choose, at their discretion, which Step 2 option to initiate first. If no improvement in pain score to less than 4/10 after completion of first option, proceed to alternate Step 2 option.**



**After Completion of Step 1 and Step 2:**

1. If no improvement in pain score to less than 4/10:
  - \* Start the **Inpatient Migraine Headache Treatment Guideline**
2. If improvement in pain score to less than 4/10:
  - \* Start the **Migraine Headache Discharge Guideline**

## **Appendix to BC Children’s Hospital Comprehensive Treatment Guideline for Migraine Headache**

### **Probable Migraine without Aura:**<sup>1</sup>

- \* Fulfilling all but one of criteria A-D
  - A. At least five attacks fulfilling criteria B-D
  - B. Headache attacks lasting 2-72 hours (untreated or unsuccessfully treated, if under age 18 years)
  - C. Headache has at least two of the following four characteristics
    1. Unilateral location (If under age 18 years more often bilateral)
    2. Pulsating quality
    3. Moderate or severe pain intensity
    4. Aggravation by or causing avoidance of routine physical activity (e.g. walking or climbing stairs)
  - D. During headache at least one of the following:
    1. Nausea and/or vomiting
    2. Photophobia and phonophobia (In young children this may be inferred from behaviour)
  - E. Not fulfilling ICHD-3 criteria for any other headache disorder
  - F. Not better accounted for by another ICHD-3 diagnosis

### **Status Migrainosus:**<sup>1</sup>

- A. A headache attack fulfilling criteria B and C
- B. Occurring in a patient with Migraine without aura and Migraine with aura, and typical of previous attacks except for its duration and severity
- C. Both of the following characteristics:
  - a. Unremitting for > 72 hours
  - b. Pain and/or associated symptoms are debilitating
- D. Not better accounted for by another ICHD-3 Diagnosis

### **Medication Information:**<sup>2,3</sup>

1. **NSAIDs:** Naproxen and Ketorolac
  - \* **Contraindication:** History of GI Bleed, Renal failure or insufficiency; Bleeding disorder; Pregnancy; hypersensitivity to ASA/NSAID
  - \* **Side Effects:** Acute Kidney Injury, GI Bleed, Abdominal Discomfort
  - \* **Caution:** If patient on anticoagulant medication
2. **Sumatriptan:**
  - \* **Contraindication:** Coronary artery disease; history of stroke, peripheral vascular disease, chronically uncontrolled high blood pressure, hemiplegic migraine or basilar migraine; if taking MAOI or had ergotamine within 24 hours; Pregnancy
  - \* **If taken triptan at home, can receive a second dose after 2 hours. Maximum 2 doses of triptan in 24 hours.**

- \* **Side Effects:** soreness at injection site, poor taste with IN route; nausea, facial flushing, rapid heart rate, fatigue, tingling and paresthesias; jaw or neck tightness, pressure or squeezing; risk of serotonin syndrome with concurrent serotonergic agents.

### **3. Diphenhydramine:**

- \* **Side Effects:** Drowsiness, paradoxical reaction

### **4. Metoclopramide & Prochlorperazine:**

- \* **Contraindication:** pheochromocytoma, pregnancy (for prochlorperazine)
- \* **Side Effects:** Extrapyramidal side effects, anticholinergic effects
- \* **Caution:** May cause prolonged QT (consider ECG prior to use), may increase seizure frequency in patients with epilepsy, may cause hypotension (for prochlorperazine). Monitor for serotonin syndrome if used with sumatriptan.

### **Pain Score:** Faces Pain Scale Revised (FPS-R)<sup>4</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 is intended to measure how much children feel inside, not how the face looks.

### **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) Rothrock JF, Friedman DI. Information for Health Care Professionals. Triptan Therapy for Acute Migraine. American Headache Society. [http://www.americanheadachesociety.org/assets/1/7/John\\_Rothrock\\_and\\_Deborah\\_Friedman\\_-\\_Triptans.pdf](http://www.americanheadachesociety.org/assets/1/7/John_Rothrock_and_Deborah_Friedman_-_Triptans.pdf)
- 3) Naproxen, Ketorolac, Sumatriptan, Diphenhydramine, Metoclopramide, Prochlorperazine, In: DRUGDEX System (Mixromedex 2.0). Greenwood Village, CO: Truven Health Analytics;c1974-2013. <http://www.micromedexsolutions.com/micromedex2/librarian#>. Accessed November 8, 2014
- 4) 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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