

HEADACHE DISORDERS IN CHILDREN AND ADOLESCENTS (6-17 YEARS OLD): A PARENTAL EDUCATION GUIDE

Criteria: Migraine

You need to have 5 headache attacks that **meet the following criteria (A+B+C)**:

A: The headache lasts 2-72 hours long (in adults 4-72 hours)

B: The headache pain **must have TWO** of the following:

- On ONE side or BOTH sides (often at the front and sides in youth)
- Has a pulsing quality
- Level is moderate or severe
- Worsens with physical activity or causes you to avoid physical activity

C: There **must be ONE** of the following:

- Nausea and/or vomiting
- Sensitivity to light **AND** noise (must have BOTH)

Criteria: Tension Type Headache

You need to have 10 headache attacks that **meet the following criteria (A+B+C)**:

A: The headache lasts between 30 minutes to 7 days

B: The headache pain **must have TWO** of the following:

- The pain is on BOTH sides of the head
- The pain has a pressing or tightening quality
- The pain level is mild or moderate
- The pain does not get worse with physical activity

C: There **must be BOTH** of the following:

- NO nausea or vomiting
- Can have sensitivity to light OR noise (NOT both)

STRATEGIES THERE ARE 2 MAIN STRATEGIES FOR MANAGING MIGRAINE

1: Migraine Prevention: What can be done to reduce the number of migraine attack days each month?

- Daily Supplements (check the dose with your healthcare provider):

Supplement	Dose
Magnesium (elemental)	9 mg/kg taken once a day or divided into 2-3 doses per day (Max 600 mg/day)
Coenzyme Q10 or ubiquinol	Less than 30 kg = 100 mg once a day; Equal to or over 30 kg = 100 mg twice a day or 200 mg once a day.
Vitamin B2 (Riboflavin)	200-400 mg/day (Max 400 mg/day).

- Neuromodulation (ask your healthcare provider; see next page)
- Daily prescription medication: Recommended to trial a treatment for at least 2 months at the proper dose.

2: Migraine Attack Treatment:

- Take medication EARLY (within the first 30-60 minutes) to allow it to work better.
- Take the right dose of medication (follow the product specific dosing instructions).
- Some people need to take more than one medication at the start of an attack (ask your healthcare provider for more information)
- A separate medication may be needed to control nausea or vomiting.
- Do not take more than 10 days/month of acute medication total (you may be at risk for medication overuse headache. Discuss with your healthcare provider).

MEDICATION & DOSAGE

Weight: _____ **kg;** _____ **Date (yyyy/mm/dd):** _____

- Always follow the product-specific dosing instructions for your child's age or weight. Your healthcare provider may recommend a higher dose.
- If your child cannot swallow a tablet, then use chewable tablets (or liquids).
- Some prescription medications come as an oral dissolving tablet or nasal spray, (useful if nausea or vomiting occur).
- Always check dosage with your pharmacist as medication formulations will vary in strength.

SELF-MANAGEMENT RECOMMENDATIONS: FOR DAILY HEADACHE PREVENTION

Movement = Exercise

Aim for 30–60 minutes of moderate to high intensity daily.

Mind & Body Connection

- Daily mindful exercises (meditation, visualization, deep breathing, biofeedback) and body relaxation techniques (yoga, massage, physiotherapy exercises) can prevent migraine attacks and lower pain/prevent escalation of pain..
- Activity pacing is a helpful tool to support youth to stay engaged in daily activities and limit activity avoidance.
- Anxiety and depressive symptoms (sometimes suicidal thoughts) are more common in children and adolescents with migraine.

Talk to your healthcare provider about mental health support. For suicidal or self-harm thoughts, visit suicideprevention.ca.

Food and diet

- Regular and balanced meals; avoid skipping meals because low sugar levels may trigger a migraine attack.
- Include protein and fibre-rich foods in every meal.
- Adequate fluid intake: goal of 8 cups of water/day
- Limit or reduce the amount of caffeine in the diet to avoid caffeine withdrawal migraine attacks. (Caffeine includes iced tea, caffeinated soda, energy drinks, chocolate, coffee, tea).
- A small number of people may have specific food triggers (e.g. tyramine, histamine). Triggers can be identified by keeping a migraine diary and eliminated if identified.
- It is NOT recommended to undertake multiple elimination diets.

Sleep

Keep a regular sleep/wake routine. Try to avoid screens 1 hr prior to sleep.

Migraine Diary:

- Use a diary to track migraine attacks, medications that have been tried and what medications have helped or didn't help. Take this information to your healthcare provider.
- There are many app based migraine diaries:
 - Canadian Migraine Tracker (free app!): <https://migrainetracker.ca>
 - N-1 Headache: <https://n1-headache.com/>
 - Migraine Buddy: <https://migrainebuddy.com/>
 - Traffic Light of Migraine: <https://migrainecanada.org/the-migraine-traffic-light-system/>

Neuromodulation Devices

- An option for both preventing and treating migraine attacks. Ask your healthcare provider if you are eligible.
- Devices work by sending electrical or magnetic signals to pain control areas. They are applied over the skin at the head, neck, or arm (they do not require a needle or to take a pill).
- There are several different neuromodulation devices. Not all devices are currently licensed for use in Canada:
 - Non-invasive vagal nerve stimulator device (approved in Canada, 12 + years).
 - External trigeminal nerve stimulation device (approved in Canada, 18 + years).
 - Single pulse transcranial magnetic stimulator device.
 - Remote electrical neuromodulation device.
 - External combined occipital and trigeminal neurostimulation.

MIGRAINE ATTACK TREATMENTS

OVER THE COUNTER OPTIONS

Medication Families

1. Non-steroidal anti-inflammatory family

Ibuprofen

Naproxen

2. Acetaminophen family

Acetaminophen

At the start of a headache, take ONE medication from a single family, or TWO if the medications are from difference families.

Example: ibuprofen + acetaminophen OR naproxen + acetaminophen.

Avoid aspirin-containing products in children and adolescents unless advised to use by your healthcare provider.

*** Do not exceed the maximum number of doses per day as noted on the product specific instructions.**

Online Resources:

- Migraine Canada: <https://migrainecanada.org/>
- American Migraine Foundation: <https://americanmigrainefoundation.org/>
- The Comfort Ability <https://www.thecomfortability.com/> (see Pediatric Pain Blog, Guided Exercises, Coping Stories and Resources):
- Migraine at School: <https://www.migraineatschool.org>

PRESCRIPTION OPTIONS

Some people benefit from specific prescription medication (speak to your healthcare provider).

Prescription medication for 6-17 year olds	
Name of the Medication (formulation)	Approval for ages
Rizatriptan (tablet, oral dissolving tablet)	Approved by FDA* for 6 yrs and up
Zolmitriptan (tablet, oral dissolving tablet, nasal spray)	Approved by FDA* for 12 yrs and up
Sumatriptan (nasal spray)	Approved by European Medicines Agency for 12 yrs and up
Almotriptan (tablet)	Approved by Health Canada and FDA* for 12 yrs and up
Sumatriptan/Naproxen (combined tablet: Sumatriptan and Naproxen)	Approved by FDA* for 12 yrs and up

* Federal Drug Agency

Disclaimer

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