Be Prepared: Making a Migraine Action Plan

Lauren Doyle Strauss, DO, FAHS
UCNS Board Certified Headache Specialist
Assistant Professor in Pediatric Neurology
Director, Child Neurology Residency
Comprehensive Headache Program, Wake Forest Baptist Health
@StraussHeadache
Disclosures

• None
How Common is Headache in Children?

• Most common manifestation of pain
  • 1/3 have recurrent HAs
  • 2 - 6% have daily HAs

• One of the most frequent reasons for neurology referral or ED visits

Jacobs, Headache, 2012
Pediatric Headache in the ED

• Mean duration of HA prior to ED is 2-3 days
• About 1/3 of pediatric patients may not have tried a medication
  – Most have used non-specific oral analgesic
  – One study showed only 2.2% have tried a triptan, while 4.7% an opioid

Often children are untreated or undertreated

Gelfand, Neurohospitalist, 2012
It’s Important to Be Prepared

Have you made a Migraine Action Plan?
Know the Terms

- Acute Medication
- Rescue Medication
- Daily Preventive Medication
Overview of Acute Headache Medications

- **Analgesics**
  - Acetaminophen
  - NSAIDs
  - Ketorolac

- **Anti-Emetics**
  - Neuroleptics
    - Metoclopramide
    - Prochlorperazine
  - Other
    - Ondansetron

- **Combination Medications**
  - Triptans
  - Anti-Histamines
    - Hydroxyzine
    - Cyproheptadine
  - Steroids
    - Medrol Dose Pak
  - DHE
  - Opiates
  - Benzodiazepines
  - Gepants
## Many Triptan Choices

<table>
<thead>
<tr>
<th></th>
<th>Time to onset (hrs)</th>
<th>Half Life (hrs)</th>
<th>Bioavailability</th>
<th>Available Preparations</th>
<th>Dosing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fast Acting Triptans</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sumatriptan</td>
<td>1.5</td>
<td>2-2.5</td>
<td>14%</td>
<td>Oral</td>
<td>1mg/kg/dose, 25mg (&lt;50mg), 50mg (&gt;50mg)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Nasal Spray</td>
<td>5mg (&lt;50mg, &lt;9yrs), 10mg (&gt;10-11 yrs), 20mg (&gt;50kg, &gt;12yrs)</td>
</tr>
<tr>
<td>Zolmitriptan</td>
<td>2</td>
<td>2.5-3</td>
<td>40-48%</td>
<td>Regular/ZMT</td>
<td>2.5mg (&lt;12yrs), 5mg (&gt;12yrs)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Nasal Spray</td>
<td>5mg (&gt;12yrs)</td>
</tr>
<tr>
<td>Rizatriptan</td>
<td>1.2-2.5</td>
<td>2-3</td>
<td>45%</td>
<td>Regular ODT</td>
<td>5mg (&lt;40kg), 10mg (&gt;40kg)</td>
</tr>
<tr>
<td>Almotriptan</td>
<td>1.4-3.8</td>
<td>3.2-3.7</td>
<td>70-80%</td>
<td>Oral</td>
<td>6.25mg or 12.5mg or 25mg (&gt;50kg)</td>
</tr>
<tr>
<td>Eletriptan</td>
<td>1-2</td>
<td>4-7</td>
<td>50%</td>
<td>Oral</td>
<td>20mg or 40mg (&gt;50kg)</td>
</tr>
<tr>
<td><strong>Slow Acting Triptans</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naratriptan</td>
<td>2-3</td>
<td>5-6</td>
<td>63% (Men), 74% (Women)</td>
<td>Oral</td>
<td>1mg, 5mg</td>
</tr>
<tr>
<td>Frovatriptan</td>
<td>2-4</td>
<td>24-30</td>
<td>24-30%</td>
<td>Oral</td>
<td>2.5mg</td>
</tr>
</tbody>
</table>
Triptans

• If one triptan fails... try, try another

• **Simple Rule of 2s:**
  • Repeat in 2 hrs
  • Limit 2 pills/day
  • 2 days/week
  • Do not mix triptans within one day

• **Side Effects:** flu-like symptoms, tightness in chest/throat/jaw

• **Cautions:** uncontrolled HTN, arrhythmia, history of stroke or heart attack, pregnancy
Combination Oral Medications

✓ Caffeine enhances the effect of other medications AND has its own analgesic effects

✗ No clinical trial has shown that butalbital has additional anti-H/A effect, but definitely has inc. MOH

✗ Careful of aspirin-containing products as they INCREASE risk of Reyes Syndrome in children

✗ Careful of adding aspirin-containing products if already taking aspirin

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**Excedrin Migraine (OTC):**
- Acetaminophen 250mg
- Aspirin 250mg
- Caffeine 65mg

**Goody Powders (OTC):**
- Acetaminophen 260mg
- Aspirin 520mg
- Caffeine 32.5mg

**BC Powders (OTC):**
- Aspirin 845mg
- Caffeine 65mg

**Midrin:**
- Acetaminophen
- Isometheptene (sympathomimetic)
- Dichloralphenazone (choral hydrate derivative)

**Fioricet:**
- Acetaminophen 300mg
- Butalbital 50mg
- Caffeine 40mg

**Fiorinal:**
- Aspirin 325mg
- Butalbital 50mg
- Caffeine 40mg
Important Needs/Preferences

• Insurance coverage
• Unable to swallow pills
• Unable to keep pills down due to vomiting
• Needle-phobic
• Sedation concerns at work, home, school
<table>
<thead>
<tr>
<th>Formulation</th>
<th>Drugs</th>
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</thead>
<tbody>
<tr>
<td>Liquid</td>
<td>Cyproheptadine</td>
</tr>
<tr>
<td></td>
<td>Metoclopramide</td>
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<tr>
<td></td>
<td>Naproxen sodium</td>
</tr>
<tr>
<td></td>
<td>Prochlorperazine</td>
</tr>
<tr>
<td>Powder</td>
<td>Diclofenac potassium</td>
</tr>
<tr>
<td>Chewable/ dissolvable</td>
<td>Ondansetron</td>
</tr>
<tr>
<td></td>
<td>Rizatriptan</td>
</tr>
<tr>
<td></td>
<td>Zolmitriptan</td>
</tr>
<tr>
<td>Nasal spray</td>
<td>Sumatriptan</td>
</tr>
<tr>
<td></td>
<td>Zolmitriptan</td>
</tr>
<tr>
<td>Injectable</td>
<td>Sumatriptan</td>
</tr>
<tr>
<td>Rectal</td>
<td>Indomethacin</td>
</tr>
<tr>
<td>Topical</td>
<td>Prochlorperazine</td>
</tr>
<tr>
<td></td>
<td>Diclofenac</td>
</tr>
</tbody>
</table>
# Migraine Medications with FDA Approval in Children

<table>
<thead>
<tr>
<th>Preventive</th>
<th>Topiramate</th>
<th>≥ 12 y</th>
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</thead>
<tbody>
<tr>
<td>Topiramate XR</td>
<td></td>
<td>12-17 y</td>
</tr>
<tr>
<td>Abortive</td>
<td>RizatRIPTAN</td>
<td>6-17 y</td>
</tr>
<tr>
<td>Almotriptan</td>
<td></td>
<td>12-17 y</td>
</tr>
<tr>
<td>Zolmitriptan NS</td>
<td></td>
<td>12-17 y</td>
</tr>
<tr>
<td>Combination sumatriptan/naproxen</td>
<td></td>
<td>12-17 y</td>
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Strauss, Practical Neurology, 2019
Acute Headache Treatment Paradigm

- **Stage 1**: Simple Analgesic
  - Acetaminophen, NSAID

- **Stage 2**: Simple Analgesic +/- Antiemetic +/- Antihistamine

- **Stage 3**: Try headache-specific medications
  - Triptans, Gepant

- **Stage 4**: Combination treatments: all together

- Treat Early!!!
- BE AWARE OF MEDICATION OVERUSE HEADACHE
- If headaches lasting > 1-2 hours, need treat with strongest medication first
- Special Advice: Trial new meds when you *don’t* have a headache
Discuss with your Provider

• **Acute Medications:**
  • When do I use the medications?
  • How do I choose which medication?
  • Take in combination?
  • How long until helpful?
  • Side effects?
  • How many doses/week?

• **Rescue Medications:**
  • When do I use a rescue medication?
  • At home or in urgent care/ED?
  • Can I repeat them?

• **Prior Medications:**
  • Create a list of each medication- document helpfulness/side effects
**Migraine Space “Cave”**

- Safe Space at home, school, work
- Possible Needs
  - **Private** – sign if needed
  - **Quiet** – ear plugs, headphones, blanket
  - **Dark** – Hat, glasses, draw curtains
  - **Aromatherapy** – Peppermint, Lavender
  - **Hot or Cool Packs**
  - **Neuromodulation**
  - Easy Access: medications, water, electrolyte fluids, bathroom
Pediatric Migraine Action Plan (PedMAP)

PedMAP

- School communication is KEY
- Quick access to medications
- Reduce stigma

Pediatric Migraine Action Plan (PedMAP)  Date: __________

<table>
<thead>
<tr>
<th>Name</th>
<th>Date of Birth</th>
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<table>
<thead>
<tr>
<th>Treating Provider</th>
<th>Phone</th>
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<table>
<thead>
<tr>
<th>Emergency Contact</th>
<th>Phone</th>
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**Headache information**

- My diagnosis is: __________________________________________
- Describe any (if any): ______________________________________

**Green Zone – Prevent more headaches**

- Get enough sleep; keep a regular schedule
- Eat healthy foods; don’t skip meals
- Drink enough water; avoid caffeine
- Get regular exercise; manage your weight
- Learn ways to relax; manage your stress

It may take 4-6 weeks to see a big change, so stick with it!
Visit www.headacheinfoguide.com to manage your headaches

**Yellow Zone – Don’t wait. Act fast to treat your headaches**

- Go to school nurse or health office right away. Take your quick-relief medicine as soon as your headache starts:
  - Take: ____________
  - Dose: ____________
  - Route: ____________ May repeat after ______ hours.
  - Take: ____________
  - Dose: ____________ May repeat after ______ hours.
  - Let your provider know if you need to take your quick relief medicine 3 or more days a week or if this plan isn’t working.

**Red Zone – Time to get more help**

- Contact your provider’s office:
  - If your headache is much worse, lasting much longer than usual, go to the emergency room.
  - You have new and very different symptoms like loss of vision, unable to move one side of your face or body, trouble walking or talking, very confused or unable to respond

- Call 9-1-1 if child loses consciousness or has stroke-like symptoms

<table>
<thead>
<tr>
<th>Provider’s Signature</th>
<th>Date</th>
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<table>
<thead>
<tr>
<th>Parents/Guardian’s Signature</th>
<th>Date</th>
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Directions to provider:
- Set 2 healthy lifestyle goals.
- Consider a daily medicine or vitamin supplement if ≥ 3 headaches per week.
- Consider Cognitive Behavioral Therapy (CBT) if PedMAP > 15. To download PedMAP, visit https://www.vahc.org/service/children-oldenheadaches/olderheadaches
Migraine Action Plan

- Diagnosis
- Medical Contacts
- Usual Symptoms
- Acute Treatment Plan
Migraine Action Plan

• When should I be worried?
• What is MY Rescue Plan?
  • When do I launch it
  • What if home rescue doesn’t work
  • Where do I go for more care
  • What medications do I avoid
• Ask ED, what are they treating with?

Peretz, Headache, 2018
Making a Headache Diary

• The Diary is FOR YOU

• What should I track?
  • Intensity Number
  • Periods
  • Acute and Rescue Medications
  • Changing of Daily Medications
Be Prepared for Your Next Migraine

• Have a conversation with your treating provider
• Know your medication options
• When should you take them
• When and where should you seek out more care