Pharmacy Pearls

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Best Practice Guidance for Reduction of Outpatient Migraine in Adults

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Migraine ranks in the top 6th of the world's most disabling medical illnesses and the highest major cause of diaability in age <50, but remains under-recognized and undertreated. Timely identification and treatment is associated with improved outcomes. In collaboration with providers from primary care and neurology, AHP has developed *Best Practice Guidance for Reduction of Outpatient Migraine in Adults*, an evidence-and value-based consensus document intended to help guide PCPs in the treatment of migraine in their adult population. You can find the full length guidance document on the AHP website *here*.

Key Steps for Migraine Management:

1

Identify Migraine:

Use of ID Migraine™ Screener is recommended

(based on Lipton et al. Neurology 2003)

1. Over the last 3 months, have you limited your activity on at least 1 day because of your headaches?
2. Do lights bother you when you have a headache?
3. Do you get sick to your stomach or nauseated with your headache?

≥ 2 **"yes"** answers = **probable migraines**

2

Identify and Resolve Medication Overuse Headache:

- **Medication Overuse Headache (MOH) Definition:** Secondary disorder in which excessive use of acute medications causes chronic daily headache in a headache prone patient.
- **MOH Clinical Diagnosis:** > 15 headache days/month, history regular acute medication use more than 2-3 days/week.
  - Diagnosis supported when headache frequency increases with increased medication use or improves when medication is withdrawn.
- **Identify and resolve MOH prior to initiating other migraine therapies:** MOH can render headaches refractory to other treatments and reduce the efficacy of abortive therapy.
- **Medication associated risk:** Opioids, Butalbital-containing combinations or ASA/APAP/Caffeine combinations > Triptans > APAP, ASA, NSAIDs
- **Most effective treatment for MOH:** Discontinue overused medication.

3

Implement/Optimize Lifestyle Strategies: Table 1

Strategies	Goal(s)
Reduce caffeine intake	*< 8 oz.* of caffeinated beverages before noon
Maintain a regular sleep schedule	At least 7 hours of sleep per night Avoid screen time for ≥ 1 hour before bed
Improve diet and avoid triggers	Monitor and avoid foods identified as triggers Avoid fasting for more than 6 hrs while awake Eat a well-balanced, healthy, diet
Improve hydration	*48 oz.* of non-caffeinated beverages daily
Regular exercise	At least *20 min.* of elevated heart rate per day, *4 days per week*

4

Initiate Treatment:

- See **Table 2** for treatment recommendations.

Clinical Practice Pearls:

Preventative treatment trials

- Medications should be given an adequate trial before determining treatment failure (clinical efficacy can take 2-4 months).
- If a patient fails a preventative treatment option, consider an agent in an alternative medication class.

The Use of Opioids and Butalbital for Migraine

Choosing Wisely recommendations from the American Academy of Neurology encourage providers to avoid the use of medications containing opioids and/or butalbital for the treatment of migraine.

- These medications are more likely to cause MOH and are not as effective as other migraine medications.
- They carry addiction risk and are associated with serious adverse effects.

When to refer to neurology

- Patients with episodic migraine should trial and fail at least 1 abortive and 1 preventative treatment before being referred.
- Patients with chronic migraine should be referred to neurology for treatment options once diagnosed.

Treatment Recommendations: Table 2

Initiate Acute (Abortive) Treatment: *choice of medication should be based on comorbidities/side effects*

First-Line Options

- Triptans: Sumatriptan 100 mg (tablets only) or Zolmitriptan 5 mg (tablets only)
- Ibuprofen 600 - 800 mg

NOTE: Triptans are all equally safe and effective and are safe to use with aura. Selection is based on cost, onset, and duration of action. If a patient does not tolerate a triptan well (chest pain, dizziness, flushing, etc,)* ***almotriptan can be better tolerated* *than other triptans, but is* ***more expensive****

AVOID

- **Caffeine-containing medications: Limit use.** Using these medications more than 2 days per week greatly increases the risk of medication overuse headache.
- **Opioids: Avoid.** Opioids contribute to medication overuse headache, tolerance/dependency, and decrease responsiveness to acute and preventative meds
- **Butalbital: Avoid completly.** Butalbital is less effective and very likely to contribute to medication overuse headache.

How to Optimize Treatment

- Initiate abortive agent as early as possible in acute attack
- Restrict use of abortive medications to only 2-3 days per week
- **Co-prescribe antiemetics *if concurrent nausea or vomiting***
  - metoclopramide 5-10 mg tablets, or prochlorperazine 10 mg tablets/25 mg suppositories
- Set patient-centered expectations and monitor ability to resume daily activities
- Treat 2-3 attacks before judging effectiveness of an agent

Initiate Preventative Treatment for Episodic Migraine: *headache burden of < 15 days per month*

- Candidates = Frequency of 4 migraines per month or > 6 headache days per month

First-Line Options

- Beta-Blockers: Metoprolol succinate ER or Propranolol ER, *or*
- Topiramate, or
- Amitriptyline

NOTE: First-line recommendations are for* ***uncomplicted migraine**; treatment recommendations for various comorbidities can be found in full detail document.*

Optimizing Treatment

- **Initiate preventative therapy** as soon as clinically indicated.
- Consider referral to neurology if patients have tried (and failed) at least 1 abortive and 1 preventative treatment.

Preventative Treatment of Chronic Migraine: *headache burden of* ***> 15 days per month*** *(≥ 8 being migraine-like or responding to migraine-specific medication)*

- Optimize lifestyle changes (Table 1), address MOH (Step 2 above) and refer to neurology for preventative treatment.

Newest Available Medication Class for Migraines: The Calcitonin Gene-Related Peptide (CGRP) antagonists are a novel class of medications (human monoclonal antibodies) approved for prevention of migraine headache. CGRP receptor stimulation is believed to be a key part of migraine pathophysiology and increased CGRP is associated with pain, phonophobia, photophobia, and nausea.

Medication Names and Mechanisms:	Erenumab (Aimovig®)	Fremanezumab (Ajovy®)	Galcanezumab (Emgality®)
	Binds to the CGRP receptor and antagonizes its function	*Binds to CGRP ligand and blocks its binding to the receptor*	*Binds to CGRP ligand and blocks its binding to the receptor*

- Currently available trials of these agents show modest treatment benefits with few harms:
  - **Reduction in headache days per month = 1.0 – 2.8 and reduction in days of acute medication use = 0.6 – 2.6**
- Concerns with available evidence include uncertainty about durability of effects and adverse effects from prolonged use (trial outcomes concluded after 12-24 weeks), theoretical concerns about long-term use and cardiovascular disease, CGRP antagonists were compared to placebo (not standard of care) in clinical trials, and patient populations were restricted to those that failed only 2-3 other preventive therapies (generalizability of results is limited).
- Cost will vary based on patients' insurance (**average cost is ~ $575 per month**). For patients with chronic or episodic migraine that have failed other preventive treatments, cost-effectiveness is below/near the upper limit of commonly accepted thresholds.