PHARMACIST'S GUIDE TO MANAGING MIGRAINES

WHY PHARMACIST KNOWLEDGE OF MIGRAINE TREATMENT IS CRITICAL

- Approximately 25% of U.S. households are impacted by migraines. Migraine headaches affect men, women, and children.[1]
- In the United States, migraine related illness has been estimated to cost as much as $36 billion per year due to lost productivity and healthcare expenditures.[1]
- More than half of migraine sufferers are never initially diagnosed and 25% of migraine sufferers could benefit from preventative treatment with only 12 % receiving such treatment. [1]
- Pharmacists can assist migraine patients through counseling on optimum treatment choices, monitoring and discussing refill frequency and assisting patients in assessing the overall effectiveness of medications.

DIAGNOSIS,SYMPTOMS AND TRIGGERS

- Migraine pain can be moderate to severe, throbbing, and felt behind the eye or near the back of the head. Many patients report that the pain begins in the same area for each attack. The pain is often only on one side of the head but may occur on both. Other symptoms may include nausea, vomiting, and light and or sound sensitivity. [2] Adults may experience migraines that last from 4 to 72 hours.[1]
- Over 50% of patients report severe impairment with an inability to function normally that requires bedrest. [3]
- Migraines are often seen as the result of various triggers that occur just prior to the attack or as long as 6 to 8 hours before the attack begins.[4]
- Triggers vary from patient to patient and the most commonly reported food triggers are cheese, chocolate, and wine.[5] Other triggers may include food with MSG, skipped meals, dehydration, lack of sleep, barometric pressure changes, stress, anger, anxiety, and hormonal fluctuations that occur with menstruation, pregnancy and menopause.[4]

PREVENTION OF MIGRAINE ATTACKS

- Non-Pharmacological Prevention: Patients can keep a detailed diary that includes hours of sleep, food and drink consumed, stress levels, weather conditions, exercise, and menstrual cycle details. Patients can avoid triggers that are perceived as leading to headaches, but complete avoidance of triggers must be balanced with quality of life.[5]
- Pharmacological Prevention : Patients using medication for acute migraine attacks more than 2 days per week should consider prophylactic medications such as beta-blockers, topiramate, amitriptyline, divalproex, the recently approved Aimovig, and others.[6] These medications may take up to 12 weeks to produce preventative effects. [7]

TREATMENT OF ACUTE MIGRAINE ATTACKS

PHARMACOLOGICAL TREATMENT- Treatment is considered successful if migraine pain is completely relieved and the patient can return to normal function within 2 hours of taking medication. [8] There is no ideal medication for ending a migraine and patients may need to try several medications before hitting upon the best option.[9] A small percentage of patients may develop medication overuse headaches when taking any of the drugs used for acute attacks.[9] Requests for early refills, and use of acute medications more than twice per week should alert pharmacists that patients may be experiencing these overuse headaches. Preventative treatment measures should be considered to avoid overuse of medications and subsequent rebound headaches.[4] Medication options for acute migraine attack include:

- Acetaminophen - First line therapy for mild to moderate migraine headaches[9]. The therapeutic dose is 1000 mg and the maximum daily dose is 4000 mg for patients with normal liver function and who drink less than 3 alcoholic beverages per day.[10] Patients should be counseled regarding other sources of acetaminophen such as OTC drugs.[9]
- Nonsteroidal Anti-inflammatory Drugs (NSAIDS and Aspirin) - First line therapy for mild to moderate migraine pain.[9] The cheapest NSAID can be tried first and liquid gel caps or powders will provide rapid onset. [9]
- Triptans- Reserved for moderate to severe migraines or for patients with pain refractory to acetaminophen or NSAIDS.[9] They work best when taken as soon as possible after onset. [11] The best triptan is the one that works for the patient, and failure with one does not preclude the use of another. [9] All triptans are contraindicated with symptoms of heart disease.[9] Pharmacists can suggest nasal or injectable triptans for patients who experience nausea or vomiting with migraine pain.[9]
- Triptans with NSAIDS- If a patient does not get relief from any of the triptans, an NSAID can be taken in conjunction with a triptan and may improve pain relief.[9]
- Ergot Derivatives- Reserved for patients that do not get pain relief from first line therapy, triptans, or NSAIDS/triptan combinations. These are usually less effective and cause more side effects than triptans. [9]
- Opioids and Butalbital- The use of these medications should be discouraged.[8] They increase the chance of drug abuse and nausea.[8] They should be reserved for patients who have medical conditions, such as cardiovascular disease, that contradict the use of triptans or other first line medications.[9]
- Medications for Additional Symptoms- Patients who experience nausea and/or vomiting with migraine can take hydroxyzine, promethazine, prochlorperazine or metoclopramide orally or rectally as available. [9]

NON-PHARMACOLOGICAL TREATMENT – For some migraine patients, devices that modulate pain can be used to prevent attacks or treat acute attacks. These may not be covered by insurance. They can be helpful for patients who want to limit medication use or get little relief from medication use.[12]

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- 1.Foundation, M.R. *About migraine : migraine facts*. 2018 [cited 2018 May 11]; Available from: http://migraineresearchfoundation.org/about-migraine/migraine-facts/.
- 2.WebMD. *Migraines and headaches health center*. 2018 [cited 2018 May 8]; Available from: https://www.webmd.com/migraines-headaches/default.htm.
- 3.Gasparini, C.F., H.G. Sutherland, and L.R. Griffiths, *Studies on the pathophysiology and genetic basis of migraine.* Curr Genomics, 2013. **14**(5): p. 300-15.
- 4.Trust, M. *About migraine. Trigger factors*. 2018 [cited 2018 May 10]; Available from: https://www.migrainetrust.org/about-migraine/trigger-factors/.
- 5.Hoffman, J. and A. Recober, *Migraines and triggers : post hoc ergo propter hoc?* Curr Pain Headache Rep, 2013. **17**: p. 370.
- 6.Pringsheim, T., et al., *Canadian Headache Society guideline for migraine prophylaxis.* Can J Neurol Sci, 2012. **39**(2 Suppl 2): p. S1-59.
- 7.Trust, M. *Living with migraine. Treatment* 2018 [cited 2018 May 7]; Available from: https://www.migrainetrust.org/living-with-migraine/treatments/preventive-medicines/.
- 8.Lanteri-Minet, M., et al., *Revised French guidelines for the diagnosis and management of migraine in adults and children.* J Headache Pain, 2014. **15**: p. 2.
- 9.Worthington, I., et al., *Canadian Headache Society Guideline: acute drug therapy for migraine headache.* Can J Neurol Sci, 2013. **40**(5 Suppl 3): p. S1-S80.
- 10.FDA. *Notice to industry : final guidance for over-the-counter products that contain acetaminophen*. November 1, 2016 [cited 2018 May 7]; Available from: http://www.fda.gov/Drugs/DrugSafety/ucm310469.htm.
- 11.Antonaci, F., et al., *Recent advances in migraine therapy.* Springerplus, 2016. **5**: p. 637.
- 12.Society, A.H. *Headache Toolbox : stimulators for the treatment of headache*. 2014 [cited 2018 May 4]; Available from: https://americanheadachesociety.org/wp-content/uploads/2016/06/Stimulators-for-the-Treatment-of-Headache-March-2014.pdf.