THE ROLE OF THE PHARMACIST IN MIGRAINE PREVENTION

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ABSTRACT

Despite the considerable prevalence and impact of migraine, most healthcare professionals receive little education about headache. As a result, misperceptions about migraine and its treatment are common and evidence-based treatment guidelines are not used in clinical practice. A pattern of recurrent, disabling head pain is invariably caused by migraine. The majority of individuals with migraine are not correctly diagnosed or adequately treated, resulting in the long-term use of relatively ineffective over-the-counter or narcotic medications. In many cases, migraine headaches are mistakenly attributed to sinus or tension headache. Sinus headaches, as defined by International Headache Society criteria, are actually quite rare, whereas tension headache is seldom of sufficient severity to cause recurrent disability. The use of validated headache rating instruments is essential to identify individuals with migraine headaches and to record the patient’s response to treatment. The use of a simple headache algorithm can help community pharmacists to rapidly identify individuals with severe migraine who could benefit from consultation with a physician. Pharmacists also play an important part in educating patients about how to use their treatment and what to expect from their acute and preventative medications, in addition to recognizing patients who are not responding adequately to their current treatments.  
headaches in primary care, 94% of the patients had migraine or probable migraine. Individuals who are seeking medical attention for what they believe is tension headache nearly always have migraine headache. The failure to identify these migraine headaches leads patients to try an assortment of ineffective therapies, resulting in continued pain and disability, until eventually a physician recognizes the headache as a migraine and prescribes a migraine-specific treatment. A better approach to headache treatment may be to reverse this process by first assessing the individual for migraine, and then moving on to other potential headache causes. Additionally, pharmacists should strive to recognize that tension headache, as defined by IHS criteria, is a non-debilitating illness that can typically be self-managed with over-the-counter (OTC) products. Indeed, most individuals with tension headache simply do not consume any treatment, given tension headache’s benign effects. Sinus infections or other sinus maladies can cause many symptoms, including headache, but rarely do such illnesses cause only a headache, especially a recurrent headache accompanied by non-sinus problems, such as photophobia, phonophobia, and debilitation. Furthermore, the IHS has not validated chronic sinusitis as a cause of headache or facial pain unless relapsing into an acute stage.2

TOOLS FOR IMPROVED RECOGNITION

Migraine is one of the few illnesses not diagnosed by any quantifiable, biological marker of illness (eg, blood pressure, bacterial cultures, or radiologic abnormality), but by patients’ retrospectively reporting symptoms. The inherent ambiguities of this system contribute to underdiagnosis and misdiagnosis. Several validated tools are now available to measure headache-related disability, including the Headache Impact Test (www.headachetest.com) and the Migraine Disability Assessment Scale (MIDAS; www.midas-migraine.net). These paper questionnaires can be quickly and easily completed by patients, either before or while meeting with a healthcare professional. Their numerical scales, which are intuitive and easy for patients to understand, illuminate “real world” impact in terms of lost time for work, home, and social activities. Furthermore, over the span of time, these tools can demonstrate improvements, or lack thereof, from ongoing treatments. Routine disease monitoring is an essential component of care in every field of medicine, but is often not performed for patients with recurrent headache. Just as we monitor blood glucose values to document the efficacy of diabetes therapy, routine headache monitoring should be performed for patients with migraine. Regular use of a headache rating scale is one way to show the patient that headaches have improved since beginning therapy. Despite the importance of this approach, few patients currently use these tools in actual clinical practice. Expanded use of these types of tools could significantly improve migraine therapy. A pilot project, using MIDAS, concluded that the majority of individuals with headache presenting to a community pharmacy had substantial morbidity and were in need of education regarding the proper role of OTC medications, the advantages of prescription agents, and the benefits of a physician’s referral. This project provides a framework towards widespread use of these tools for screening—and ultimately migraine management—in community pharmacies.

The fact that someone is seeking a pharmacist’s help is a good indicator that the patient could benefit from consulting with a physician and migraine-specific therapy. A simple 4-item questionnaire (Table) has been developed to help pharmacists assess individuals who present to community pharmacies with a complaint of headache.1

<table>
<thead>
<tr>
<th>Table. Four-Item Assessment Questionnaire</th>
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<tr>
<td>1. What percentage of your headaches cause debilitation? (eg, unable to work, go to school, perform household tasks, or need to lie in bed)</td>
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<tr>
<td>- If the majority of headaches cause debilitation, refer to a physician.</td>
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<tr>
<td>2. How many days/month are you completely headache free?</td>
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<td>- If ≤15 days are headache free/month, refer to a physician.</td>
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<td>3. What symptoms accompany your headaches?</td>
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<td>- Patients are not obligated to go to a physician based on questions 1 or 2, and those who report any of the following are candidates for OTC therapy: aggravation with routine activity, unilateral location, sensitivity to light and sound, throbbing pain, moderate-to-severe intensity, or nausea.</td>
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<td>4. What OTC agents have you previously used?</td>
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<td>- Suggest a previously unused medication. Patients failing ≥2 OTC products should consider physician referral.</td>
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OTC = over-the-counter.
MIGRAINE HEADACHE MEDICATIONS

Migraine medications include acute and preventive agents. Acute drugs are intended to stop or significantly relieve an occurring attack. All individuals with migraine should have at least 2 acute options at their disposal. In contrast, preventive drugs are not indicated for all patients. According to the US Headache Consortium’s evidence-based migraine treatment guidelines, preventive therapy should be considered under the following circumstances10:

- Recurrent migraine that, in the patient’s opinion, significantly interferes with his or her daily routine, despite acute treatment.
- Frequent headaches (“frequent” is not specifically defined by the guidelines, but is generally regarded by headache specialists as ≥3 headache-days, or 2 days of debilitation caused by headache, per month)
- Contraindications to, failure of, or overuse of acute therapies
- Cost considerations
- Patient preference
- Presence of uncommon migraine conditions, such as basilar migraine

The goals of preventive therapy are to reduce attack frequency, severity, and duration, improve response to acute agents, and most importantly, reduce disability and allow patients to return to normal function. Epidemiologic research indicates that approximately 50% of individuals diagnosed with migraine are candidates for preventive therapy, yet only 5% are actually prescribed prophylactic agents.3,11 This disparity offers pharmacists an opportunity to improve patients’ lives by identifying unmet needs and directing patients towards appropriate care.

Drugs currently approved for the prevention of migraine in adults include divalproex sodium (Depakote; Abbott Laboratories, Abbott Park, Ill), topiramate (Topamax; Ortho-McNeil Neurologics, Inc, Titusville, NJ), propranolol (Inderal; Wyeth Pharmaceuticals Inc, Philadelphia, Pa), and timolol (Blocadren; Merck & Co, Inc, Whitehouse Station, NJ). The evidence-based guidelines also endorse amitriptyline (Elavil; AstraZeneca, Wilmington, Del).10 Several other medications also may benefit patients, including antiepileptic drugs, β blockers, calcium channel blockers, antidepressants, and non-steroidal anti-inflammatory drugs.

Various scenarios exist where pharmacists may encounter patients with unmet preventive needs, including individuals seeking early refills of acute medications, asking for recommendations of “better” acute agents, continually escalating acute drug dosage or frequency, or complaining of life disruptions despite acute therapy. Medication overuse headache develops gradually over time and a patient seeking early refills of a prescription pain medication should prompt an assessment of whether the patient’s headache is adequately controlled. All of these situations present opportunities for pharmacists to assess, educate, and refer individuals with migraine to appropriate care, including preventive treatment.

Once prescribed a preventive drug, patient education to establish realistic expectations is essential. Key counseling points include the need to consume the medication daily regardless of a headache’s presence or absence and allowing the drug at least 4 to 6 weeks to reach full effect, because patients who are not aware of this may become frustrated when their headache frequency or intensity does not immediately improve.

In addition, patients should be encouraged to keep a headache diary, as well as periodically complete a tool, such as MIDAS, to document what effects, if any, therapies are providing.

There are several valuable sources of information to which the pharmacist may consult or refer the patient. The National Headache Foundation has a Web site with educational resources and a state-by-state list of physicians who are experienced in headache care (www.headaches.org). This is an important resource, because a patient with a migraine headache is at risk of receiving less than optimal care if the physician is not experienced with migraine care. If the patient’s physician is overprescribing acute medications, the pharmacist also may suggest that the patient see a different physician. The American Council for Headache Education (www.achenet.org) also provides patient education and physician referral resources.

CHRONIC HEADACHES

Chronic daily headache (CDH) is more than migraine; it is a pattern of frequent, debilitating headaches that occur 15 or more days per month.2 CDH, which can develop from episodic migraine, is often a consequence of the overuse of acute pain medications, including OTC analgesics, narcotic, and butalbital medications.12 Pharmacists should be con-
cerned about the risks of overuse of acute pain medications, because some data show that 80% of patients who come to acute headache clinics are overusing acute headache medications. As discussed earlier, escalating use of these types of acute medications is a warning sign, and physician referral is appropriate, preferably to a headache specialist.

The way that we ask people about the frequency of their headaches can significantly affect how likely we are to identify those with chronic headaches. For example, asking individuals with headache, “How often do you have headaches?” may cause them to think about only their most severe headaches. As a result, they may underreport the number of headaches that they experience. On the other hand, asking individuals with headache, “How many days of the month are you completely headache free?”, often causes them to realize that they have headaches every day or nearly every day.

CONCLUSIONS

A patient who is approaching a pharmacist for help with managing headache probably suffers with unrecognized migraine and requires referral to a physician for preventive options. For patients prescribed a preventive agent, many are never taught about their proper use. Pharmacists can provide educational resources for patients to learn more about these approaches. Migraine treatment should emphasize restoring the patient to normal functioning, not just reducing pain.

REFERENCES