Medical Management of Adult Headache

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KEYWORDS

• Analgesics • Nonsteroidal anti-inflammatory drugs • Triptans
• US consortium guideline • Beta blockers • Anti-epileptic drugs • Natural therapies

KEY POINTS

- Simple analgesics may suffice for migraine with little disability, but triptans are essential for many with migraine.
- Chronic migraine is a complication of episodic migraine with numerous other risk factors.
- Medication overuse of acute treatments plays a critical role in many patients.
- Preventive therapies for migraine are not as effective here, but OnabotulinumtoxinA has strong evidence for efficacy.
- Therapies for tension-type headache are focused on prevention, most commonly with older tricyclic antidepressants. Migraine medications are not typically useful for tension-type headache.

INTRODUCTION

In previous articles it is apparent that not all headaches are the same. Therefore, in examining treatment of headache with medical therapies it is necessary to subdivide headache into its component parts and focus on each individually. In this article, we focus on the primary headache disorders, those in which there is no underlying primary causation, save the patient's own natural physiology and genetics. These are migraine, tension-type headache, and cluster headache, as well as chronic migraine, a complication of episodic migraine, and one that can perplex even headache experts. Treatments focus on evidence-based approaches to management insofar as possible with expert opinion where evidence is insufficient to provide guidance.

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Abbreviations	
NSAID	Non-steroidal anti-inflammatory agents
DHE	Dihydroergotamine
SUNCT Syndrome	Short-lasting unilateral neuralgiform headache with conjunctival injection and tearing
TTHA	Tension type headache
CM	Chronic Migraine
MO	Medication Overuse
onaBoNTA	OnabotulinumtoxinA
TCA	Tricyclic antidepressants
SSRI	Serotonin specific reuptake inhibitors
PREEMPT	Phase III REsearch Evaluating Migraine Prophylaxis Therapy

EPISODIC MIGRAINE

Acute Treatment

Acute treatments for migraine are designed to relieve the symptom complex of pain, photophobia, phonophobia, and nausea. Ideally, these treatments provide relief within 2 hours, without recurrence and with minimal adverse events. In 2000, the US Headache Consortium produced an evidence-based guideline for acute treatment and report summary.[1] The guideline has not been updated.

Migraine is highly variable within an individual and in the population. Selection of treatments use stratified care based on levels of disability and symptoms, such as nausea or vomiting. Additionally, selecting treatments or route of administration is based on specific attack characteristics to a stepped care approach within and between attacks.[1] Frequency of use is the limiting factor for these agents, as frequent use leads to medication overuse (MO) and chronification of migraine.

Simple analgesics, combination analgesics, and prescription nonsteroidal anti-inflammatory agents (NSAIDs) (**Table 1**) are considered first-line therapy for migraine.[1] Of the NSAIDs, naproxen may have the least risk of cardiovascular concerns.[2] For those patients who fail to respond to these agents consistently, then oral triptans are used. Triptans are used as first-line agents before analgesics for more severely impacted patients. Nonoral administration of triptans or dihydroergotamine (DHE) is preferred for those who do not respond to oral triptans consistently[3] or have early onset of nausea or vomiting.

Newer Acute Treatments

A number of treatments were not available at the time of the 2000 guideline but have evidence similar to those agents in category A of the guidelines for consistent efficacy and tolerability. One involves innovative delivery improving effectiveness, such as diclofenac powder (Cambia).[4] Three other triptans have come on the market: almotriptan, eletriptan, and frovatriptan, and all bear similarity to the 4 reviewed triptans.[5] A novel tablet design combines sumatriptan and naproxen sodium,[6] altering the pharmacokinetics of both drugs for favorable outcomes. An easy to use method is available especially in the patient with nausea, with a recently approved sumatriptan patch (Zelrix).[7] When a nonoral treatment of migraine is needed in which there is early onset of nausea or if the patient does not have a consistent response to oral triptans, then zolmitriptan nasal spray or subcutaneous administration of sumatriptan without a needle (Sumavel DosePro sumatriptan, zogenix pharmaceuticals, emeryville, CA) is available.[8] The NSAID, ketorolac, is used[9] as a parenteral rescue medication.