

Headache Toolbox

Chronic Migraine

What happens when migraine occurs more days than not? *Chronic migraine* is defined by the Food and Drug Administration (FDA) as headache for at least 15 days/month, at least 4 hours/day. Pain, light sensitivity, noise sensitivity, nausea, and worsening with activity reduce functioning. Struggling with normal expectations can lead to reliance on medications to function.

Chronic migraine is common, affecting an estimated 3% in the United States. It often starts off as migraine in discrete episodes (episodic migraine), occurring 2 or fewer days/week, and gradually transforms to the more frequent pattern, with only 8 days/month required to have migraine features. About 3% of episodic migraine transforms to chronic migraine per year.

Risks for transforming from episodic to chronic migraine include female gender, head/neck trauma, lower educational/socioeconomic levels, acute medication frequency, more than 2 caffeinated beverages/day, poor sleep, anxiety, snoring, depression, and thyroid disorders. Obesity increases chronic migraine risk. Combining exercise with regular sleep may reduce headache frequency, anxiety, and mild depression.

Stress is a common trigger that can provoke increased headache frequency and intensity. Trained providers can teach behavioral techniques, including relaxation training, cognitive behavioral therapy, biofeedback, and mindfulness, addressing depression, anxiety, and stress. Preventive medications can dial down chronic migraine pain and reduce headache frequency.

Medications used acutely and too frequently to treat individual headache days can result in *medication overuse headache* or *rebound headache*, a form of chronic migraine. This increase in acute medication use and headache

frequency often sneaks up. At first medications work, they stop working as well, and finally stop working altogether. Other medications are then added, and one can wind up with multiple medication cocktails used throughout the month to maintain.

Ibuprofen (Advil), naproxen (Aleve), acetaminophen (Tylenol), and aspirin, acetaminophen, and caffeine combinations (Excedrin) may become less effective and taken more often. Migraine can cause pain over sinuses and nasal drainage, so people begin to take decongestant combinations. Over-the-counter sleep remedies often contain diphenhydramine, which when taken frequently can cause weight gain, depression, and more headaches. Migraine sufferers may turn to narcotics for relief, such as hydrocodone or oxycodone combination (Vicodin or Percocet) tablets. Butalbital combinations, such as Fioricet or Esgic, can lead to more frequent headaches less and less treatable. Even triptans, mainstay of effective, specific migraine treatment, can, when overused, provoke chronic migraine. Acute medications taken for another pain disorder, such as back pain or fibromyalgia, go into the same bloodstream. Combining these medications can result in chronic daily headache.

How can one avoid the pitfall of too much acute medication and rebound? Remember the rule of 2's with acute medications: no more than 2 doses/day, 2 days/week. Avoid treating migraines with narcotics or butalbital combinations at all. Address modifiable risk factors, such as poor sleep, obesity, depression, anxiety, caffeine overuse, and lack of exercise. An ounce of prevention is worth a pound of cure; that is, it is far better to stay in episodic migraine than try to treat established chronic migraine.

In the United States, most people with chronic migraine are overusing acute medications. There are health consequences to overusing acute medications, consequences to the gastrointestinal tract, kidneys, and other body systems. Rebound will not get better while this stew of medications is consumed. Withdrawal from medication overuse can result in headaches worsening before improvement.

OnabotulinumtoxinA (brand name Botox) is the only FDA-approved medication for treatment of chronic migraine. Treatment involves 155 units injected in defined locations of head and neck with an evidence-based FDA-approved protocol (PREEMPT) every 3 months. OnabotulinumtoxinA can wear off, with ongoing injections often required. Later, injections can be stopped or delayed, evaluating whether migraines return and, if so, at what frequency.

Other medications may be of benefit for chronic migraine but are not FDA-approved for this indication, and include topiramate and other antiseizure medications and antidepressants, such as amitriptyline or venlafaxine. Your headache care provider could match other health conditions with one prevention that helps both problems. Someone with depression might

consider antidepressants, while an overweight individual, topiramate.

Those with past, resolved, chronic migraine are at risk for relapsing back into a frequent pattern; follow up is important. Increased relapse risks are male gender, higher headache frequency, longer medication overuse duration, especially combination medications, poor sleep, and other pain disorders.

Effective treatment of chronic migraine is aimed at returning to an episodic pattern of headache occurrence. It will not cure migraine, but will reduce the frequency to 14 or fewer days per month, and allow for effective acute treatment of the headaches when they do occur.

Chronic migraine is treatable. Patient and provider need to actively control its impact. If the above interventions do not work, consider a multidisciplinary headache treatment program combining cognitive behavioral strategies with medications and physical therapy to regain headache control.

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