



# MANAGING YOUR MIGRAINE

Here is information that may help you on your journey towards “headache free or nearly so”

## 1 Migraine Tip of the Month: Headache Diary

Individuals who plan to seek medical attention for their migraine should consider keeping a headache diary for a month or two prior to their evaluation. It can be surprisingly difficult to answer the question: “How bad are your headaches?”, and having some objective evidence in hand may be of great assistance to your doctor in working with you to develop an appropriate treatment plan.

Your headache burden is a blend of frequency and severity, often aggravated by varying degrees of nausea, light/sound sensitivity, aura and a host of other unpleasant symptoms. Paradoxically, your efforts to relieve that burden may in fact cause it to increase. Specifically, overuse of medications intended to treat acute headache may produce a gradual worsening of your headache disorder. Although commonly known as “rebound”, a more accurate name for this process is “medication overuse headache” [\[link\]](#).

*a journey of a thousand miles begins with a single step*

THIS INFORMATION  
MAY SHORTEN YOUR  
JOURNEY

## 2 Migraine Treatment of the Month: Botox!

In October 2010 the FDA approved onabotulinumtoxinA (BotoxA) for the treatment of chronic migraine, a particularly malignant form of migraine estimated to afflict as many as 1 in 50 Americans. “Chronic” migraine implies that you have a history of typical episodic migraine but that but your previously infrequent headaches have increased to the point where you are experiencing bothersome head pain at least 15 days per month.



Despite the prevalence of chronic migraine, the enormous financial cost to society it imposes and the tremendous degree of pain and suffering it inflicts, the disorder often is underdiagnosed, misdiagnosed and either inadequately treated or not treated at all...simply “lived with”.

Healthcare providers—even specialists trained in handling neurologic disorders—frequently characterize chronic migraine as “sinus headache”, chronic tension-type headache, “mixed” headache (ie, co-existing primary headache disorders: a combination of chronic tension-type headache and episodic migraine) or headache attributable to “stress”, chronic anxiety or depression. This is unfortunate. At worst, such misdiagnosis can lead to the application of medical therapies that are unnecessary, costly, potentially dangerous and of no value in reducing the patient’s headache burden.

The case that follows vividly illustrates these points.

---

### Amy is a 33 year old Attorney who lives in Alexandria, VA and works across the Potomac in Washington, D.C.

---

Amy is a 33 year old attorney who lives in Alexandria, Virginia and works across the Potomac in Washington, D.C. She is an attractive, personable and highly articulate individual who somewhat ruefully relates her all too familiar story. Amy began experiencing migraine headaches shortly after her first menses at age 13. Over the next 10 years her headaches would recur now and then, usually in association with menses. With law school, however, came a significant increase in her level of chronic stress, and the increased stress was paralleled by a change in her headaches. Her previously paroxysmal “now and



then” headaches became increasingly pervasive, and while her headaches often were not as severe as those of earlier years, they were occurring more days than not. Punctuating her frequent lower intensity headaches she continued to have attacks of her “usual migraine” several times a month.

The chronic headaches interfered with her ability to concentrate on her studies, and the superimposed attacks of her “usual migraine” caused her to miss classes and group study sessions. She found herself falling ever further behind at school, her stress consequently increased and she eventually began experiencing headaches on a daily basis.

Believing her headaches to result from stress and associated anxiety, her primary care provider prescribed escitalopram (Lexapro), a selective serotonin re-uptake inhibitor (SSRI). That drug’s only effect was to eliminate completely her already waning libido, leading to estrangement from her boyfriend and yet more stress.

She was referred to a neurologist who prescribed amitriptyline (Elavil), an older antidepressant also widely used for prevention of migraine and tension-type headaches. This drug caused Amy to gain weight and to experience dry mouth and

daytime sedation. Her headaches persisted unchanged.

At that point, having dropped out of law school, broken up with her boyfriend and moved back home to live with her parents, Amy sought a second neurologic opinion. The second neurologist diagnosed her as having chronic migraine, prescribed various medications for her to use for acute headache treatment and began serial BotoxA injection therapy.

Within three months and following 2 sets of BotoxA injections, Amy had experienced a 50% reduction in her headache burden. Within another 6 months and following a total of 4 sets of injections she was experiencing only occasional “headache days”, and her headaches on those days were controlled with the medications she had been prescribed for acute treatment. After a total of 6 sets of BotoxA injections administered over a period of 15 months, Botox therapy was discontinued. Six months following this she continues to do well, with infrequent headaches and no need for migraine prevention therapy. She is about to graduate from law school, and she is living-happily-with a new boyfriend. The total “direct” (medical) cost of Amy’s headache management prior to the diagnosis of chronic migraine exceeded \$250,000. The “indirect” costs (ie, those resulting from her pain and emotional suffering)

are more difficult to calculate. Amy's case is in no way unusual. Every day, in subspecialty headache clinics across America and globally, healthcare providers encounter many thousands of patients with stories no less compelling than Amy's. Particularly disheartening in Amy's case is that her experience occurred in a major metropolitan center chock-full of well-trained and generally knowledgeable physicians and physician specialists.

---

### BotoxA is currently the only therapy specifically approved by the FDA for the prevention/suppression of chronic migraine...

---

BotoxA is currently the only therapy specifically approved by the FDA for the prevention/suppression of chronic migraine, and with the exception of topiramate (eg, Topamax), the only treatment with a solid base of scientific evidence to support its use in treating this disorder. Studies comparing the two therapies—BotoxA and topiramate—have suggested they are more or less equally effective in treating chronic migraine but that in part because of its more appealing side effect profile patients prefer BotoxA. A large national study intended to settle the issues of relative effectiveness and patient preference presently is being conducted ([www.clinicaltrials.org](http://www.clinicaltrials.org)).

Botulinum toxin is naturally produced by a bacterium of the *Clostridium* species, and human ingestion of large amounts of the toxin can produce botulism, a serious and potentially fatal acute neurologic illness involving diffuse muscle paralysis. The dose of botulinum toxin used to treat chronic migraine is much, much lower than that involved in cases of botulism, and to date there have been

no reports of systemic spread of the toxin causing clinically significant neuromuscular disease when BotoxA has been used to treat headache.

The first hints that BotoxA might convey a beneficial treatment effect on migraine came primarily from two sources. First, there came a rising tide of anecdotes that individuals with migraine who were receiving BotoxA injections for cosmetic purposes were reporting reductions in their headache burden. Second, patients with receiving BotoxA injections for their painful dystonias (ie, involuntary, sustained contraction of large muscles or groups of muscles) reported a reduction in their dystonia-related pain even before there occurred any appreciable improvement in their dystonias.

The specifics of how BotoxA suppresses chronic migraine remain unclear, but the effect does not appear to be mediated through paralysis/relaxation of the muscles injected. In one large national study, BotoxA was safe but therapeutically ineffective in treating chronic tension-type headache. Instead, BotoxA appears to have a direct anti-nociceptive (“anti-pain”) effect that in chronic migraine involves “short-circuiting” the biophysiological pathway that generates the headache disorder.

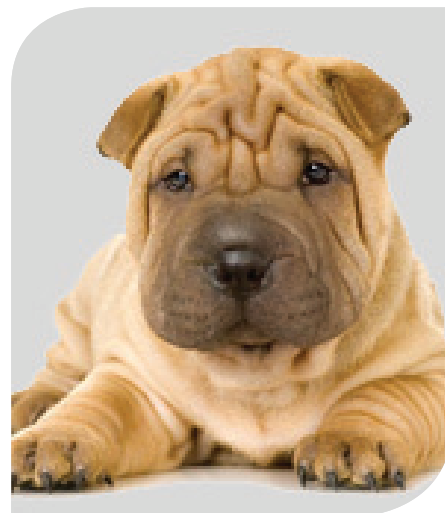
---

### Will I Lose My Wrinkles as Well as My Headaches? Will I Look Like a Freak?

---

BotoxA does exert its cosmetic effect via muscle relaxation, and using the toxin to suppress chronic migraine can produce cosmetic changes. On rare occasions, treatment will provoke a transient, reversible drooping of one eyelid or (very rarely) both. More commonly, injection of BotoxA into the muscles of the forehead will result in “smoothing out” of any wrinkles in the area of injection, an effect

that tends to persist for 3 to 6 months. While use of BotoxA for the treatment of chronic migraine may cause the patient to experience cosmetic changes he or she may find pleasing, it should be



BEFORE BOTOX



AFTER BOTOX?

emphasized that the dose and injection paradigms for BotoxA mandated by the FDA are quite different than those typically employed when the toxin is injected specifically for cosmetic purposes.

To learn more about BOTOXA, check out this [\[Link\]](#).

## 3 Migraine Myth of the Month

**Myth:** Migraine results from stress, depression, anxiety or some acquired or inherent deficiency of personality.

**Reality:** Migraine is co-morbid with a number of other medical disorders (ie, the disorder occurs in migraineurs at a higher frequency than in non-migraineurs), and these co-morbidities presumably are often genetic in origin. Migraineurs are more prone than non-migraineurs to bipolar disorder, depression, chronic anxiety disorder and panic attacks. These associations – egs, migraine and depression – do not necessarily indicate a causal relationship. When migraine and depression co-exist, one disorder may aggravate the other, but migraine doesn't create depression de novo, and depression biologically does not generate migraine.

This last point is an important one. It's all too easy for the frustrated third party (be it spouse, parent, child or co-worker) to detect the mood disorder that may accompany migraine and to identify that disorder

as the source of the patient's headaches. From there it's a short jump to equating the mood disorder (and thus the migraine itself) with some personal deficiency that the migraineur is perpetuating voluntarily. Too often – and to the detriment of any treatment plan developed – physicians and even the patients themselves buy into this misperception. One common result of the ensuing confusion is that the physician and patient may engage in a verbal jousting match, with the physician maintaining that depression is causing the headaches, and the patient insisting that it is the headaches that have caused the depression.

Such a waste of time. As stated already, the conditions, migraine and depression, are co-morbid, and what this implies for clinical management is that physicians evaluating migraine patients should take particular care to keep their eyes and ears attuned to detect the presence of a mood disorder that requires treatment. It seems a bit silly when you think about it. Physicians don't waste time debating with a severely depressed stroke patient whether the stroke caused the depression or the depression caused the stroke; instead, they

treat the depression and simultaneously prescribe treatment intended to prevent recurrent stroke.

---

**Patients may confound the situation further by minimizing their active depression or anxiety when speaking with their physicians.**

---

It's unfortunately true that many physicians either are not especially adept at detecting mood disorders or are reluctant even to explore the possibility of their presence. Patients may confound the situation further by minimizing their active depression or anxiety when speaking with their physicians. If you do the latter, you are working against your own efforts to improve your health, and, specifically, to reduce your migraine. If you are depressed, chronically anxious or experience acute attacks of inexplicable anxiety, ask for help. Depression is like a wound infection: diagnosed and treated early, it's relatively easy to eradicate; left to fester, it's much more difficult to treat...and can even be fatal.

