Will Botox help your migraines?

In case you hadn’t heard, Botox can now be used and potentially claimed on insurance for migraines.

Surprising I know.

You’re probably wondering how will an injection of Botox into wrinkles around my face help with migraine?

Botox is one of few things I haven’t tried. After hearing some stories both positive and negative, I’ve decided to do a little digging to get to the bottom of Botox and decide whether it is something worth considering or not.

Let’s find out!

What is Botox?

According to a recent article, a whopping 84% of us have no idea what’s in the injections that you receive for Botox.

Botox is a type of Botulinum toxin medically known as OnabotulinumtoxinA. It’s a neurotoxic protein produced by a bacteria.
A neurotoxic protein is a protein which is poisonous or destructive to nerve tissue. Botox works by blocking nerve activity in the muscle which leads to a temporary reduction in muscle activity.

Botox can effectively weaken a muscle for a period of 3 to 4 months. (1)

Botox injections block certain chemical signals. The signals blocked are mostly those responsible for muscle contraction. (2)

Just about everyone has heard of Botox for cosmetic purposes. As we get older a few unwelcomed wrinkles tempt a growing number of people to get Botox to help them look younger.

But little do most realize just how many legitimate medical uses there are for Botox.

Isn’t Botox just a beauty treatment?

Actually no.

Since the 1970s Botox has been used to treat a variety of medical conditions. Today there are at least 20 conditions where Botox may be used.

These include:

• Cervical dystonia- severe neck muscle spasms
• Blepharospasm – an uncontrollable eye twitch or muscle spasm
• Severe and excessive underarm sweating
• Eye alignment or ‘cross eyes’
• Bruxism or teeth grinding
• Overactive bladder
• Chronic migraine

And more.

Botox for migraine
Like many other migraine treatments, Botox was originally discovered when patients reported an improvement in their migraines whilst taking Botox for another purpose.

Botox was approved for migraine in 2010 when Allergen, a supplier of Botox, presented evidence to the FDA from two studies showing a slight improvement in the incidence of chronic migraines whilst undergoing Botox treatment. (3,4)

Why Botox helps with migraine is not fully understood.

For a muscle to contract, the nerve releases a chemical messenger called acetylcholine. Acetylcholine is a neurotransmitter which sends signals from one neuron to another. In this case, acetylcholine attaches to cells in the muscle which causes them to contract. When Botox is injected the release of acetylcholine is blocked which prevents the contraction of the muscle.

Abnormal muscle contraction is reduced by Botox which allows the muscle(s) to become less stiff.

In migraine, it is thought that Botox relaxes muscles that may be otherwise sensitive to pain and may even block pain signals to the brain.

What to expect

If you’re getting Botox, you’re getting the needle. Lots of them!

There are 31 injection sites over your head and neck for migraine. There is a specific migraine protocol which strictly instructs the administering doctor exactly where to insert each needle.

It’s a good idea to have a good idea of these injection sites not only so you know what to expect but so that you can ensure your doctor follows them. If the migraine protocol isn’t followed it can compromise the effectiveness of your treatment.
The injections may take around 15 mins with most injections feeling like a small prick or bee sting. Expect the injections around the forehead and eyebrows to be a little more uncomfortable than the rest.

On your first treatment Botox can leave you with an immediate headache or potentially trigger a migraine so it’s best to go in prepared with abortive treatments handy. You may also experience flu-like symptoms of muscle aches and pains, nausea and fatigue.

The most common symptoms are neck pain and headache. (3)

You need 2-3 rounds of injections to confirm whether Botox will work for you or not. That’s up to 9 months before you may realize any meaningful improvement.

Results vary. Some migraine patients respond in the first treatment (1-4 months) whilst others may require 3 treatments before they can confirm one way or the other. If, after the third treatment you don’t have an improvement, then it is unlikely to help in any further attempts.

Botox doesn’t interact with the usual preventative headache medications so those may be continued during Botox therapy with the approval of your doctor.

If you respond successfully Botox can help you experience a significant reduction in migraine frequency per month. It may also assist in reducing the severity and duration of your migraine. (7)

Will it make you migraine free? According to Dr Mark W Green, Director of Headache and Pain Medicine, Mount Sinai School of Medicine he warns that “this is result is unusual and should not be expected”.

**Botox Evidence & Results**

Studies began originally in the mid 1990s to see if Botox could improve headaches. Several large, quality trials were conducted for Botox with several
types of headache but results were disappointing. No improvement was seen over placebo for tension headache or episodic migraine. (8)

Detailed reviews of the study did show that there might be a sub group of patients with chronic migraine who might benefit and so further trials were conducted.

Two Phase 3 clinical trials recruited 1384 patients to test Botox against placebo. These trials were called the PREEMPT trials for Phase 3 Research Evaluating Migraine Prophylaxis Therapy.

The results showed the Botox was significantly outperformed placebo.

The placebo showed a reduction of 6.4-6.9 migraine days per month versus the Botox treatment which showed had a 7.8-9.2 reduction. Both results were measured after 24 weeks. (7)

Like other migraine studies, the placebo factor was significant. Still, based on the results, a migraine doctor might expect an average of 7 to 9 less migraine days per month with their patient after 24 weeks on Botox (or 2 treatments).

Botox has not been shown to work for the treatment of migraine headaches that occur 14 days or less per month or for other forms of headache.

Challenges to Botox for Migraine

Several criticisms have been voiced about Botox for chronic migraine. (6)

1. The actual benefit of Botox in terms of reduced headache days greater than placebo is small from the studies.
2. Some patients included in research had medication overuse headache which could mean their symptoms or results may be linked to other treatments or drugs being taken.
3. Botox is expensive.
4. Side effects included headache, rash, pain, stiffness & muscle spasm.
Other migraine specialists have observed that results from Botox vary. Some experience no change at all whilst some experience a significant reduction in headache days. (6)

Interestingly, the UK’s drug regulatory agency mentioned in its approval that Botox helps avoid the systemic side effects of pills and it’s safety profile was better.

**Botox Cost**

Costs for Botox varies by country and practice. Another factor which affects how much the treatment gets back is how much you can claim from your health insurer.

Health insurance rarely covers the full cost, but you may be able to get a co-contribution from your health insurer if you qualify for the treatment as a chronic migraine patient.

**USA**

In the US you can expect to pay between $300 to $600 for the treatment. This is for a single treatment visit lasting 3-4 months.

US based Allergen offer funding program you can find out more about if your insurer does not cover Botox for migraine or if you don’t have insurance. [You can find out more about that here](#).

**Australia**

For a single Botox visit you can expect the cost to be around $700 before any rebates. Depending on your health insurer, you may be able to your out of pocket expense down to $300-500.

**UK**
Similarly, one 3-4 month treatment may cost up to £500-600 pounds. Botox treatment on the NHS will cost around £350.

Is Botox right for you?

Botox is a billion dollar industry. It’s used for a variety of cosmetic and medical conditions and more recently for chronic migraine.

Botox may be worth considering if:

- if you have trouble remembering to take your medication
- the side effects from your current medication are severe
- if you have medication overuse headache
- if your current treatment isn’t effective
- you’re not afraid of needles

However, in all of those cases a non pharmaceutical migraine preventative may also be a good option. Botox is not the only choice. The Cefaly device, biofeedback, CBT have all been shown to help prevent migraines and certainly most of these are cheaper in the long run.

But Botox does help some people. I suspect most patients either love or hate it.

You’ll love it if you get results. According to Dr Peter Goadsby, the results for an individual can be “quite spectacular” for some.

But if you don’t respond to treatment, then you’re paying a lot money to be poked by needles that do little than smooth one or two wrinkles. Given the cost of the treatments, you’re not likely to get the cosmetic treatment as a free bonus well as migraine treatment. For the most part, the injections sites are different.

In the worst cases some people get worse and stay that way until the treatment wears out. Or they may experience more severe side effects but these aren’t common.
At the end of the day, Botox is a welcomed addition into the migraine toolbox. I think at this stage I’ll be keeping Botox and my money in my back pocket unless things get worse. But at this stage, I’m going to hold off.

What about you?

Sources:


