

Migraineur

For those who strive to live well despite migraine

MIGRAINE AND SEXUALITY:

A Link to Libido?

MIGRAINE TRIGGERS AND AGGRAVATORS:

Flipping the 'On' Switch



CHRONIC MIGRAINE

BOTOX® prevents headaches in adults with Chronic Migraine: 15 or more headache days a month, each lasting 4 hours or more. BOTOX® is not approved for 14 or fewer headache days a month.

BOTOX® prevents, on average, 8 to 9 headache days and migraine/probable migraine days a month (vs 6 to 7 for placebo).



BOTOX® for Chronic Migraine?



what about cost?

does it work?

Questions about BOTOX®?
It's time to ask your doctor.

INDICATION

BOTOX® (onabotulinumtoxinA) is a prescription medicine that is injected into muscles and used to prevent headaches in adults with chronic migraine who have 15 or more days each month with headache lasting 4 or more hours each day in people 18 years and older.

It is not known whether BOTOX is safe and effective to prevent headaches in patients with migraine who have 14 or fewer headache days each month (episodic migraine).

IMPORTANT SAFETY INFORMATION

BOTOX may cause serious side effects that can be life threatening. Get medical help right away if you have any of these problems any time (hours to weeks) after injection of BOTOX:

- **Problems swallowing, speaking, or breathing**, due to weakening of associated muscles, can be severe and result in loss of life. You are at the highest risk if these problems are preexisting before injection. Swallowing problems may last for several months.
- **Spread of toxin effects.** The effect of botulinum toxin may affect areas away from the injection site and cause serious symptoms, including loss of strength and all-over muscle weakness; double vision; blurred vision; drooping eyelids; hoarseness or

change or loss of voice; trouble saying words clearly; loss of bladder control; trouble breathing; and trouble swallowing.

There has not been a confirmed serious case of spread of toxin effect away from the injection site when BOTOX has been used at the recommended dose to treat chronic migraine.

BOTOX may cause loss of strength or general muscle weakness, vision problems, or dizziness within hours to weeks of receiving BOTOX. **If this happens, do not drive a car, operate machinery, or do other dangerous activities.**

Do not receive BOTOX if you are allergic to any of the ingredients in BOTOX (see Medication Guide for ingredients); had an allergic reaction to any other botulinum toxin product such as Myobloc® (rimabotulinumtoxinB), Dysport® (abobotulinumtoxinA), or Xeomin® (incobotulinumtoxinA); have a skin infection at the planned injection site.

The dose of BOTOX is not the same as, or comparable to, another botulinum toxin product.

Serious and/or immediate allergic reactions have been reported, including itching; rash; red, itchy welts; wheezing; asthma symptoms; dizziness; or feeling faint. Get medical help right away if you experience symptoms; further injection of BOTOX should be discontinued.

in a survey,

97%

of current BOTOX® users say they plan to keep using it!*(n=71)



and

92%

of current BOTOX® users said they wish they'd talked to a doctor and started sooner!*(n=71)



BOTOX® prevents headaches in adults with Chronic Migraine before they even start.

It's about 10 minutes of treatment once every 3 months.†

It's time to talk to your doctor about BOTOX® and ask if samples are available.

By participating in the BOTOX® Savings Program, you acknowledge and agree to the full Terms & Conditions set out at BOTOXSavingsProgram.com/TermsandConditions. Patients enrolled in Medicare, Medicaid, TRICARE, or any other government-reimbursed healthcare program are not eligible. Other restrictions and maximum limits apply.

you may pay

\$ **0**

text SAVE to 27747‡

BOTOX®
onabotulinumtoxinA injection

CHRONIC MIGRAINE

BOTOXChronicMigraine.com

*2020 BOTOX® Chronic Migraine Patient Market Research BOTOX® Current Users.

†BOTOX® injections are given by your doctor.

‡See Privacy & Terms: <http://bit.ly/2RvxiWt>. Message & data rates may apply. Message frequency may vary. Text HELP for help or STOP to end.

IMPORTANT SAFETY INFORMATION (continued)

Tell your doctor about all your muscle or nerve conditions, such as ALS or Lou Gehrig's disease, myasthenia gravis, or Lambert-Eaton syndrome, as you may be at increased risk of serious side effects, including difficulty swallowing and difficulty breathing from typical doses of BOTOX.

Tell your doctor about all your medical conditions, including if you have or have had bleeding problems; have plans to have surgery; had surgery on your face; have weakness of forehead muscles, trouble raising your eyebrows, drooping eyelids, and any other abnormal facial change; are pregnant or plan to become pregnant (it is not known if BOTOX can harm your unborn baby); are breastfeeding or plan to (it is not known if BOTOX passes into breast milk).

Tell your doctor about all the medicines you take, including prescription and over-the-counter medicines, vitamins, and herbal supplements. Using BOTOX with certain other medicines may cause serious side effects. **Do not start any new medicines until you have told your doctor that you have received BOTOX in the past.**

Tell your doctor if you received any other botulinum toxin product in the last 4 months; have received injections of botulinum toxin such as Myobloc®, Dysport®, or Xeomin® in the past (tell your doctor exactly which product you received); have recently received

an antibiotic by injection; take muscle relaxants; take an allergy or cold medicine; take a sleep medicine; take aspirin-like products or blood thinners.

Other side effects of BOTOX include dry mouth; discomfort or pain at the injection site; tiredness; headache; neck pain; eye problems such as double vision, blurred vision, decreased eyesight, drooping eyelids, swelling of your eyelids, and dry eyes; drooping eyebrows; and upper respiratory tract infection.

For more information, refer to the Medication Guide or talk with your doctor.

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch or call 1-800-FDA-1088.

Please see accompanying Summary of Information about BOTOX®.

If you are having difficulty paying for your medicine, AbbVie may be able to help. Visit AbbVie.com/myAbbVieAssist to learn more.

©2022 AbbVie. All rights reserved.

BOTOX and its design are registered trademarks of Allergan, Inc., an AbbVie company. All other trademarks are the property of their respective owners.

US-BCM-210764 02/22

 **Allergan**
an AbbVie company

Summary of Information about BOTOX® (onabotulinumtoxinA)

What is the most important information I should know about BOTOX®?

BOTOX® may cause serious side effects that can be life threatening. Call your doctor or get medical help right away if you have any of these problems any time (hours to weeks) after injection of BOTOX®:

- **Problems swallowing, speaking, or breathing**, due to weakening of associated muscles, can be severe and result in loss of life. You are at the highest risk if these problems are pre-existing before injection. Swallowing problems may last for several months
- **Spread of toxin effects.** The effect of botulinum toxin may affect areas away from the injection site and cause serious symptoms including: loss of strength and all-over muscle weakness, double vision, blurred vision and drooping eyelids, hoarseness or change or loss of voice, trouble saying words clearly, loss of bladder control, trouble breathing, and trouble swallowing

There has not been a confirmed serious case of spread of toxin effect away from the injection site when BOTOX® has been used at the recommended dose to treat Chronic Migraine.

BOTOX® may cause loss of strength or general muscle weakness, vision problems, or dizziness within hours to weeks of taking BOTOX®. **If this happens, do not drive a car, operate machinery, or do other dangerous activities.**

BOTOX® dosing units are not the same as, or comparable to, any other botulinum toxin product.

What is BOTOX®?

BOTOX® is prescription medicine a medical professional injects into muscles to prevent headaches in adults with chronic migraine who have 15 or more days each month with headache lasting 4 or more hours each day in people 18 years and older.

It is not known whether BOTOX® is safe or effective to prevent headaches in people with migraine who have 14 or fewer headache days each month (episodic migraine).

Who should not receive BOTOX®?

Do not receive BOTOX® if you are: allergic to any of the ingredients in BOTOX® such as botulinum toxin type A and human serum albumin; had an allergic reaction to another botulinum toxin product such as Myobloc® (rimabotulinumtoxinB), Dysport® (abobotulinumtoxinA), or Xeomin® (incobotulinumtoxinA); or have a skin infection at the planned injection site.

What should I tell my doctor before treatment?

Tell your doctor about all your muscle or nerve conditions, such as amyotrophic lateral sclerosis (Lou Gehrig's disease), myasthenia gravis, or Lambert-Eaton syndrome, as you may be at increased risk of serious side effects.

Tell your doctor if you have or have had breathing problems such as asthma or emphysema; swallowing problems; bleeding issues; plan to or have had surgery; have forehead muscle weakness such as trouble raising your eyebrows; drooping eyelids; or any changes to your face.

Tell your doctor if you are pregnant, plan to become pregnant, are breastfeeding or plan to breast feed. It is not known if BOTOX® (onabotulinumtoxinA) can harm your unborn baby or if BOTOX® passes into breast milk.

What Are Common Side Effects?

The most common side effects include neck pain; headache; migraine; slight or partial facial paralysis; drooping eyebrows; eyelid drooping; bronchitis; musculoskeletal stiffness; muscular weakness; pain in 1 or more muscles, ligaments, tendons, or bones; muscle spasms; injection site pain; and high blood pressure. Other side effects have been reported including allergic reactions e.g. itching, rash, red itchy welts, wheezing, asthma symptoms, or dizziness or feeling faint.

These are not all of the possible side effects. Call your doctor for medical advice if you experience any side effects after treatment with BOTOX®.

What Should I Tell My Doctor About Medicines and Vitamins I Take?

Using BOTOX® with certain other medicines may cause serious side effects. **Do not start any new medicines until you have told your doctor that you have received BOTOX® in the past.** Tell your doctor if you have received an injection with another botulinum toxin product in the last 4 months, such as Myobloc®, Dysport®, or Xeomin®. Be sure your doctor knows which product you received.

Tell your doctor about all prescription and over-the-counter medicines, vitamins and herbal supplements you take; recent antibiotic injections; anticholinergics; muscle relaxants; allergy or cold medicine; sleep medicine; aspirin-like products; and blood thinners. **Ask your doctor if you are not sure whether your medicine is listed above.**

To Learn More

If you would like more information, talk to your doctor and/or go to BotoxChronicMigraine.com for full Product Information.

You may report side effects to the FDA at www.fda.gov/medwatch or call 1-800-FDA-1088.

Based on v2.0MG1145 Rev. 06/2019

BCM69906-v4 05/20

All trademarks are the property of their respective owners. © 2020 Allergan. All rights reserved. ® marks owned by Allergan, Inc.

Patented. See: www.allergan.com/products/patent_notices

Myobloc® is a registered trademark of Solstice Neurosciences, Inc.

Dysport® is a registered trademark of Ipsen Biopharm Limited Company.

Xeomin® is a registered trademark of Merz Pharma GmbH & Co KGaA



Migraineur

VOLUME 18/SPRING 2023

Special Features

- 9 Migraine and Sexuality:
A Link to Libido?
- 12 Migraine Triggers and Aggravators:
Flipping the 'On' Switch
- 14 Managing Menstrual Migraine:
How to Avoid That Monthly Misery

In Every Issue

- 18 Migraine Treatments of the Month:
Zavprent Nasal Spray
- 20 Migraine Myth of the Month:
If you don't have a family history of
migraine, then you don't have migraine.
- 22 Doctor on Call:
"Benign" sexual headache

Editor-in-Chief
John F. Rothrock, MD

Managing Editor
Diane Andress-Rothrock

Senior Editorial Advisors
Robert P. Cowan, MD
Richard B. Lipton, MD

Web Editor & Designer
Clower Collective

Printing
Minuteman Press Bethesda
RLT@mmpbethesda.com

Publisher
Celerity Press, LLC
Bethesda, Maryland

©Celerity Press, 2022. All rights reserved. No part of this publication may be reproduced, stored in or introduced into a retrieval system or transmitted by any means (electronic, mechanical, photocopying, recording or otherwise) without the prior written permission of the copyright owner or his formal designate. The views and opinions expressed in Migraineur reflect the experience and perceptions of the editors and contributors. While those views and opinions may be well-informed, this magazine is not intended to substitute for a face-to-face evaluation by a provider skilled in headache diagnosis and management. Readers are encouraged to use Migraineur as a tool that enhances their understanding of migraine and complements whatever management plan they and their providers have developed.



9



12



14

Editor's Note

*Dr. Rothrock is director of neurology advanced practice provider training and professor of neurology at Inova Health and the University of Virginia School of Medicine. He has served as editor of **Migraineur** since the magazine's inception in 2016.*

“ChatGPT crushes real doctors in answering patient questions”

I often read and enjoy Vinay Prasad's “Sensible Medicine”, and this was the title of his recent summary of an article that appeared in the *Journal of the American Medical Association* which described the results of a “man vs machine” study comparing the quality of the answers to patient questions provided by physicians vs ChatGPT. The machine “won”.

In the news and throughout the social media we find ourselves suddenly beset by an ever-increasing clamor over the potential good versus malevolence of “artificial intelligence” (AI). Not that this clamor - this debate - is inappropriate; anyone who doubts AI will convey a tremendous change in our culture, economy and very behavior need only consider the staggering societal impact of the Internet-connected “smart phone”.

But no matter whether you perceive AI to be the salvation of mankind or its destruction, it seems intuitive that even the most sophisticated AI program will require ongoing input generated from human experience and creativity in order to avoid eventually exhausting the supply of what it can so efficiently store, analyze, retrieve and regurgitate. But what exactly does this have to do with migraine?

To perform effectively as a neurologist one must become adept at data input, analysis and processing. A good neurologist learns how to ask the appropriate questions, to prioritize the answers received (separating the wheat from the chaff) and, combining these verbal data with what can be gleaned from the physical examination, then to provide an accurate diagnosis. This is no less true for migraine, cluster and other primary headache disorders than it is for stroke, multiple sclerosis, and Parkinson's disease.

Equally important to the effective practice of clinical neurology is acquiring the art of observation. Repetitive observation leads to *pattern recognition*, a key ingredient to maximizing the likelihood of accurate diagnosis, and with experience comes improved pattern recognition. The very best clinicians amongst us approach each new patient as a new source of data and, an opportunity to improve pattern recognition... and thus diagnostic acumen. For example, while no two migraineurs are identical, when it comes to clinical presentation, there are relatively few variations on the migraine theme amongst the many millions afflicted by the disorder. That said, outliers do exist, and if the pattern of the clinical presentation does not “fit” with a diagnosis of migraine based on one's skill at using pattern recognition, it may be time to consider another cause for the patient's symptoms.

My new headache clinic patients who provide a very typical history for migraine and whose physical/neurologic examinations are normal often ask how I can make the diagnosis of migraine and propose a treatment strategy without first obtaining a brain CT or MRI scan. The simple answer: in that clinical setting – given those data/that *pattern* - the yield of brain imaging is essentially nil. By the process of informed pattern recognition they have migraine, and to reflexively obtain a brain MRI scan costing thousands of dollars is pointless, wasteful and even potentially harmful. On the other hand, if something is not quite right - if there is something in the history or on exam that does not conform to the *pattern* of migraine - it may be that brain imaging is very much indicated.

Data input and data analysis blended with pattern recognition to produce accurate and useful output – sounds tailor-made for AI. With continued new data input might a “machine” (AI) achieve such a nuanced level of pattern recognition that it could duplicate or exceed the performance of an experienced headache medicine clinician? Perhaps at the quantitative level, but after having spent these past few decades observing in many thousands of patients the sometimes subtle qualitative differences that distinguish one patient from another, in this particular case my money is on man...and not the machine.



John F. Rothrock

John F. Rothrock, MD, Editor in Chief
edoffice@migraineurmagazine.com



Stay in the Know

As always, we welcome all interested parties to Migraineur magazine and invite you to become an **electronic subscriber**. It will cost you nothing, and by subscribing you will receive an email notification as soon as a new issue is out and posted on our open-access website as well as access to blogs and special announcements. To subscribe, simply go to our website (migraineurmagazine.com), find “Subscribe”, type in your name, email address and zip code and then hit “Submit”.