

---

## Views and Perspectives

---

### Delay in OnabotulinumtoxinA Treatment During the COVID-19 Pandemic-Perspectives from a Virus Hotspot

Ashhar Ali, DO

The COVID-19 pandemic has undoubtedly changed our practice of medicine. With our collective resources and attention focused on caring for those afflicted with the disease, other medical conditions have temporarily but understandably faced constraint. For migraine patients who often require in-person visits for infusions and procedures, this has become particularly challenging. Here, we share our experience in navigating this exigency amidst a local surge of COVID-19.

**Key words:** COVID-19, chronic migraine, Botox, onabotulinumtoxinA

(*Headache* 2020;60:1183-1186)

---

#### BACKGROUND

Due to the COVID-19 pandemic, many medical centers have opted to close all outpatient clinics and procedures to mitigate the impact of this disease. Such closures have either occurred out of caution, to protect patients and providers from exposure to the disease by means of social distancing, or due to limitation of resources, as outpatient healthcare providers including physicians, advanced practice providers, and support staff have been redeployed to emergency departments and inpatient units. In addition, with the limited availability of personal protective equipment (PPE), procedures and elective surgeries have been postponed to preserve PPE for COVID-19 care.

---

From the Henry Ford Health System, Department of Neurology, Division of Headache, Wayne State University School of Medicine, Detroit, MI, USA (A. Ali).

Address all correspondence to A. Ali, Henry Ford Health System, Department of Neurology, Division of Headache, Wayne State University School of Medicine, Detroit, MI, USA, email: aali13@hfhs.org

As a result, in virus hotspots such as New York City, New Orleans, and here in Detroit, non-emergent medical visits and procedures, such as biopsies and non-time-sensitive surgeries, have been postponed. It has become particularly challenging for migraine patients that live in and around these hotspots.

#### TRANSITIONING TO VIRTUAL CARE

Clinical providers across the country have had to adjust practice styles by converting in person visits to remote visits using video technology or telephone. Within the neurological subspecialties, it is perhaps Headache Medicine that has best adapted to this change, as the diagnosis of headache disorders is largely based on a patient's history. Treatments including oral and injectable medications can safely be prescribed to local pharmacies that offer drive-thru services, and in many cases, free home-delivery. While the exclusion of secondary causes of headache requires comprehensive neurological examination and, at times, diagnostic testing, it may not be time-sensitive in patients with chronic headache.

Accepted for publication April 12, 2020.

*Conflict of Interest:* None

With a steep learning curve, it has taken weeks to adjust to this transition, but with time and diligence we have seen tremendous progress. However, our main challenge has been the delay and/or cancelation of in-person migraine treatment.

### **POSTPONING ONABOTULINUMTOXIN A PROCEDURES IN THE ERA OF COVID-19: OUR EXPERIENCE**

Here in southeast Michigan, treatment of headache had to evolve as a result of this pandemic. Inpatient admissions for intravenous (IV) dihydroergotamine, outpatient infusion therapies, and procedures such as pericranial nerve blocks have been on hold due to the active surge of COVID-19 patients. Perhaps most challenging for patients and headache providers alike is the delay in the administration of botulinum toxin injections for patients with chronic migraine. This is a population that has often suffered for years. They have had to fail numerous non-FDA approved preventive therapies due to insurance restrictions in order to be offered onabotulinumtoxinA, which until the spring of 2018 was the only FDA-approved treatment for chronic migraine. And, outside of this pandemic, even a 1-2 week delay in a treatment is challenging and at times disabling for a person with chronic migraine. Hence many of our patients have become comfortable with and reliant upon their quarterly treatments and are not prepared for a disruption.

Suspecting that a delay may not be well-received by some of our patients, we at our headache clinic have proactively offered video visits in place of their onabotulinumtoxinA treatment. The intent behind this was 2-fold: (1) to review their migraine care and develop a strategy to manage a flare of their chronic migraine (2) to reassure them that we are with them in their struggle and that their migraine care is as important as any other health condition.

During these video visits, we tailor a short-term care plan using various treatments. These include many of the “bridge” strategies highlighted by the recent Szperka et al publication to help break a severe or continuous pain cycle.<sup>1</sup> Additional treatments that have been offered include short courses of oral corticosteroids, a temporary increase in the dose of existing oral prophylactic treatment, transitioning (perhaps

temporarily) to a monoclonal cGRP antibody, and trials of neuromodulation devices.

The 3 recent cases are illustrated below. All patients have been receiving the FDA-approved PREEMPT protocol for chronic migraine. They were seen via virtual video visits between March 30th, 2020, and April 10th, 2020.

**Case 1.**—A 46-year-old female has been responding well to quarterly onabotulinumtoxinA injections since late 2017. Her acute therapy has been combination sumatriptan/naproxen. She raised concerns about using an NSAID during this pandemic that has been cited (but since been refuted by the World Health Organization and European Medicines Agency) as potentially worsening COVID-19.<sup>2,3</sup> She preferred to avoid all NSAIDs, and thus we changed her acute therapy to rizatriptan. She was prescribed chlorzoxazone to use as needed during the daytime for breakthrough pain. A short-term preventive with tizanidine at bedtime was also started. She was very appreciative of the consultation and provided words of encouragement to our healthcare team during this crisis.

**Case 2.**—A 26-year-old female with chronic migraine for 1 year, previously with episodic migraine, received her 1st onabotulinumtoxinA treatment in January of 2020. Following this initial treatment, she had a 50% improvement in both migraine severity and frequency. During the video visit, she raised significant concern about any delay in her onabotulinumtoxinA treatment. She contacted a neurologist’s office approximately 90 miles away, outside the COVID-19 hotspot of southeast Michigan, and was able to be scheduled for her next treatment 2 days later. We facilitated transfer of records and authorization. She was appreciative of our support and willingness to facilitate her temporary care outside of our clinic. She will resume her next onabotulinumtoxinA treatment with us as this active surge subsides.

**Case 3.**—A 35-year-old female has received 2 botulinum toxin injection treatments since the fall of 2019. Since her 2nd treatment, she had only 1 migraine. Overall, she reports a 95%-100% improvement in migraine frequency and severity. She expressed grave concern regarding a delay in her onabotulinumtoxinA treatment. She had just passed the 12 week mark since her last treatment and has already noticed

daily mild non-migrainous headache. She endorses tremendous anxiety about the delay and questions why, from her perspective, a medically necessary and time-sensitive treatment has to be delayed. We acknowledged her concerns and empathized with her. We proceeded to develop a short-term treatment plan. She was provided with a methylprednisolone dose pack, and her prophylactic treatment, nortriptyline, was increased to 50 mg nightly. She was also started on tizanidine every 8 hours. We ended the visit by reassuring her that her medical condition is a priority for us and that we would resume her onabotulinumtoxinA treatment as soon as safely possible. By the end of the visit, she was appreciative of the visit and gesture.

## REFLECTIONS

The virtual visit experience has been humbling. Most patients that we have reached out to have been willing to delay their onabotulinumtoxinA treatment given the circumstances, especially when the treating provider directly reaches out to the patient. It appears that most do recognize the risks of exposure to COVID-19 with any mutual contact particularly in a healthcare setting and want to do their part in preventing the spread of this disease. Often this is supplemented with words of support for those of us on the frontlines, who are juggling between our traditional outpatient duties in caring for the migraine population and our newly assigned frontline duties that include direct care of COVID-19 patients. They are satisfied with the “bridge” plan and often end their visit by sharing words of encouragement and reminding us healthcare providers to stay safe and well.

Few patients have expressed anxiety coupled with frustration. There is anxiety about delaying a treatment that has been so effective for them for so long. There is frustration that perhaps their medical condition is being minimized in light of this pandemic. It yields a response of, “well, what about my migraine?” or “I get that COVID-19 is priority, but why is my condition being ignored?” In these situations, we have found it helpful to simply acknowledge their concerns and worries rather than challenge it. Ultimately, chronic migraine is disabling, and botulinum toxin injections have repeatedly been shown to improve migraine-related disability and quality of life.<sup>4,6</sup> Further, we do see that

COVID-19 is unlikely to cause significant complications in our greater migraine population which consists of young, healthy women.<sup>7,8</sup> Hence, from the perspective of the patient, I can understand why feelings of appreciation may be mixed with feelings of worry, frustration, and a sense of neglect. And by acknowledging the concerns and emotions, by demonstrating our support for them through proactively scheduled tele-visits, and by providing a backup “bridge” treatment plan, we feel we have been able to better navigate this challenge.

## CONCLUSION

As this virus continues to spread and other so-called hotspots are formed, novel strategies to facilitate the care of our migraine patients, particularly those that come in regularly for procedures or infusions, will need to be carefully thought out. This pandemic has evolved, and it now appears that COVID-19 will be with us for some time. Our migraine patients need to hear from us, perhaps now more than before, that they too are priority and that their care will not be neglected or brushed aside, be it during this time of crisis or in the future. Hearing this directly from us will go a long way.

## REFERENCES

1. Szperka CL, Ailani J, Barmherzig R, et al. Migraine care in the era of COVID-19: Clinical pearls and plea to insurers. *Headache*. 2020. doi:10.1111/head.13810.
2. Day M. Covid-19: ibuprofen should not be used for managing symptoms, say doctors and scientists. *BMJ*. 2020;368:m1086.
3. Day M. Covid-19: European drugs agency to review safety of ibuprofen. *BMJ*. 2020;368:m1168.
4. Dodick DW, Turkel CC, DeGryse RE, et al. OnabotulinumtoxinA for treatment of chronic migraine: Pooled results from the double-blind, randomized, placebo-controlled phases of the PREEMPT clinical program. *Headache*. 2010;50:921-936.
5. Lipton RB, Varon SF, Grosberg B, et al. OnabotulinumtoxinA improves quality of life and reduces impact of chronic migraine. *Neurology*. 2011; 77:1465-1472.
6. Santoro A, Copetti M, Miscio AM, Leone MA, Fontana A. Chronic migraine long-term regular treatment with onabotulinumtoxinA: a retrospective

- real-life observational study up to 4 years of therapy. *Neurol Sci.* 2020. doi: 10.1007/s10072-020-04283-y.
7. Onder G, Rezza G, Brusaferro S. Case-fatality rate and characteristics of patients dying in relation to COVID-19 in Italy. *JAMA.* 2020. doi:10.1001/jama.2020.4683.
  8. CDC COVID-19 Response Team. Severe outcomes among patients with coronavirus disease 2019 (COVID-19) – United States, February 12–March 16, 2020. *MMWR Morb Mortal Wkly Rep.* 2020;69(12):343-346.