

Accepted Manuscript

Evidence on botulinum toxin in selected disorders

Simpson, Elina Zakin

PII: S0041-0101(18)30033-3

DOI: [10.1016/j.toxicon.2018.01.019](https://doi.org/10.1016/j.toxicon.2018.01.019)

Reference: TOXCON 5808

To appear in: *Toxicon*

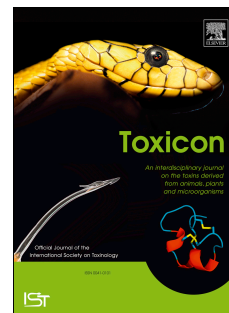
Received Date: 16 August 2017

Revised Date: 29 November 2017

Accepted Date: 28 January 2018

Please cite this article as: Simpson, , Zakin, E., Evidence on botulinum toxin in selected disorders, *Toxicon* (2018), doi: 10.1016/j.toxicon.2018.01.019.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



1 **EVIDENCE ON BOTULINUM TOXIN IN SELECTED DISORDERS**

2

3 **ABSTRACT:**

4 Botulinum toxin (BoNT) is a neurotoxin produced by the bacteria *Clostridium botulinum*
5 that has become widely used for various neurologic indications. The four toxin formulations
6 currently available for use in the United States (approved by the Food and Drug Administration)
7 are onabotulinumtoxinA (Botox®), abobotulinumtoxinA (Dysport®), incobotulinumtoxinA
8 (Xeomin®), and rimabotulinumtoxinB (Myobloc®). While the FDA-approved labels indicate that
9 potency conversions should not be done, literature supports relative dose equivalents of
10 approximately 1:1:2-4:50-100, respectively. The aim of this paper is to review the evidence on
11 the use of BoNT formulations available in the United States for specific neurologic disorders,
12 including blepharospasm, cervical dystonia (CD), upper and lower extremity spasticity and
13 chronic migraine. Data from the updated 2016 American Academy of Neurology (AAN)
14 guidelines are presented and the level of evidence for use of the four available preparations of
15 BoNT are discussed (table 2 in appendix).

16 For the management of blepharospasm, the recommendations are for use of onaBoNT-
17 A and incoBoNT-A injections with level B evidence. For the management of CD, the
18 recommendations are for use of aboBoNT-A and rimaBoNT-B with level A evidence. For the
19 management of upper extremity spasticity, the recommendations are for use of aboBoNT-A,
20 incoBoNT-A and onaBoNT-A with level A evidence. For the management of lower extremity
21 spasticity, the recommendations are for use of onaBoNT-A and aboBoNT-A with level A
22 evidence. For the management of chronic migraines, the recommendations are for use of
23 onaBoNT-A to help improve headache-free days, with level A evidence. It is important for the
24 clinician to understand that BoNT is for use in symptomatic control for the underlying
25 neurologic disorder and, at present, has not shown a role in disease modification.

26

27 **KEY WORDS:** BoNT; blepharospasm; cervical dystonia; limb spasticity; chronic migraine

28

29

30

31

32

33

34

Download English Version:

<https://daneshyari.com/en/article/8394474>

Download Persian Version:

<https://daneshyari.com/article/8394474>

[Daneshyari.com](https://daneshyari.com)