Botox in Dentistry
Alec S. Griffin, DDS
New and Scary

- We tend to fear things we don’t understand.
- The more informed we are about a topic more appropriate and logical decisions can be made.
- I recommend an in depth evidence based approach
  - Literature review
  - Continuing education
  - Study of political climate

DOPL & State Legislature

- Larry Marx: The current law does not address Botox or dermal fillers. The use of these products by dentist is neither prohibited or specifically permitted in the statute or rule. The Utah Dental Licensing Board does not make laws or recommend law changes to the Utah Legislature. To have Botox or dermal fillers specifically allowed for cosmetic use by dentist the Legislature would be the ones to add language in the Dental Practice Act. The key portions of the above statutory language are in (7)(a)(i). If a dentist feels the treatment they are providing is within the definition of dentistry and they are within their competency based on education, training and experience they may perform treatment.

- Stuart Adams: Larry Marx explains well the reasons why we cannot give this practitioner a perfect answer on Botox. The law doesn’t always perfectly define what may or may not be done. When that is the case, we generally try to take a liberal reading of the statute to favor people trying to do business in Utah. I think you will see in Larry Marx’s email that he responded much better than bureaucratically, even telling them “The current law does not address Botox or dermal fillers. The use of these products by dentist is neither prohibited or specifically permitted in the statute or rule.” Larry further guided them by saying, “The key portions of the above statutory language are in (7)(a)(i). If a dentist feels the treatment they are providing is within the definition of dentistry and they are within their competency based on education, training and experience they may perform treatment.” In other words, when the law is unclear, we try to advise them to read the law and decide how to proceed themselves.
Can Dentists Administer Botox?

- Dr. Engar - PIE covering Botox and dermal fillers for cosmetic purposes and therapeutic uses as long as provider can prove they are properly trained.

In Gord We Trust

- Nebraska Dental Association - Recommended the use of Botox and Dermal fillers in dentistry.
- VA GPR: Teaches Botox administration
- Nebraska ADA meeting I attended in 2015
  - I remembered Dr. Christensen saying, 'Dentists are uniquely qualified to administer Botox. Who gives more injections in the face!'
  - I wanted to make sure I was remembering that correctly so he is not misrepresented.
  - I sent an E-mail to Dr. Christensen's assistant Toni Wengreen to make sure I remembered correctly.
Dr. Gordon Christensen

Dear Dr. Griffen,

Here is Gordon’s response to your email.

Alc: Congratulations on your involvement with the UOA relative to the Botulinum challenge. I feel that the entire subject is only political and the wisdom, properly educated, see THE MOST appropriate practitioners for many of the uses of Botulinum and derma fillers.

Go for it!

Regards, Gordon

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Dr. Louis Malcmacher

President, AAFE (American Academy of Facial Esthetics)

Dr. Christensen Recommended

AAFE courses: “fulfill medical and dental state regulatory board requirements for adequate training and have been accepted as fulfilling proper training needed for injectables.”

“I have personally worked with many of the state medical boards and dental boards around the country in this area for the last 10 years. This includes Utah when I had a number of conversations with Noel Taxin from the DOPL at that time who oversaw the medical and dental boards in Utah...”

Malpractice insurance: “TDIC, Medical Protective, at this time most dental liability insurances either cover it or have a rider available.”
Dr. Malcmacher

Me: "I have been working on clarifying state Botox regulations in Utah. The board has asked me to put a presentation together and I wondered if you could help me with some information about yourself and if there have been any issues with general dentists administering Botox in your state?"

Dr. Malcmacher: "I am not aware of any patient clinical issues or complaints that have ever come before a dental board regarding Botox and fillers, that by itself should tell you that it is as safe if not safer than any other areas of dentistry."

"Everyone agrees this is now within the scope of dental practice. The AAFE has given and is giving its live patient training courses at the ADA annual meeting the last few years and this coming year. I have even done a video with Dr. Gordon Christensen on the use of Botox and fillers in dentistry. Also see some articles attached. There are now constant articles about Botox and fillers in dental journals, the attached are an example."

"The best the board will tell you is what we already know other boards have said- if the dentist uses it within the scope of dental practice and they document is appropriately, it is fine. It is up to the dentist to make sure they are within the scope of dental practice. That is what the AAFE has been teaching in Utah for nearly 10 years already."

Louis Malcmacher
President
American Academy of Facial Esthetics

Dr. Louis Malcmacher maintains an entirely and general practice in Utah. He is an internationally recognized leader and author, known for his entertaining and comprehensive teaching style. He has won recognition in various dental seminars and has taught thousands of healthcare professionals in the areas of aesthetic dentistry and facial estheticistry. He has also lectured at major medical and dental meetings throughout the US, Europe, and the Middle East. Dr. Malcmacher has also been extensively involved in the arena of media. He is frequently seen on CNN, Fox, ABC, CBS, NBC, 20/20, Wall Street Journal, New York Times, USA Today, Baltimore Sun, Washington Post, Chicago Sun Times, Dental Press USA, IDG, Ortho, M.A.D., Reader's Digest, and many others. Dr. Malcmacher is a member of the American Academy of Facial Esthetics, a Fellow of the World Dental Laser Institute, and is a leading author at a number of magazines. Dr. Malcmacher is President of the American Academy of Facial Esthetics, the AAE, which is a multi-disciplinary worldwide educational organization with members and members affiliated with the best aesthetic and non-surgical laser and injectable services for the best available patient treatment outcomes.

Contact of Interest - Esthetique Institute

Presentation(s):
3/20/2019 - State Therapy for Globe Dentists Meeting
9:00 am - 11:00 am
You have seen many references to use of Botox and dermal fillers by dentists. Are you ready for some changes in your practice? You know more about facial aesthetics, oral mucosal and the psychology of facial appearance than most dentists and your patients love the outcome. A video presentation included. A clinical demonstration of a patient shows the simplicity of the concept. Today included one.

Current providers

- Physicians
- Midlevel Providers
  - Nurse practitioners
  - Physician assistants
- Registered Nurses
  - Many providers delegate a bulk of injections to staff
- Oral and Maxillofacial Surgeons (most states)
- Dentists
  - (Vivalearning: Dr Malmacher stated that almost all states allow therapeutic botox use and over thirty now allow it for cosmetic use)
Pacific Training Institute

- The Pacific Training Institute for Facial Aesthetics (PTI) is a Canadian company that provides training for both Canadian and U.S. providers. According to PTI, "92% of physicians performing botulinum toxin [injections] have no formal training in the field of botulinum toxin, nor guidelines laid out by their regulatory body. Physicians are not required to take any additional training in order to provide botulinum toxin or dermal fillers." Dentists and registered nurses require postgraduate education to perform these procedures. A registered nurse may perform these services under the supervision of a physician or a dentist. These guidelines have been consistent with current legislation in the United States.

Massachusetts 2013 Decision

- Massachusetts approved the use of botox and dermal fillers in 2013. The group created to investigate the use of these products said, "The task force unanimously felt strongly that it’s an area that dentists can definitely work in and deliver without a problem, given our background and training."
- The article from the ADA newsroom also states:
- Massachusetts dentists who want to administer Botox and fillers must be board certified in oral and maxillofacial surgery or have completed a minimum of eight hours of training in the administration of botulinum toxins and/or dermal fillers that includes instruction in the anatomy of head and neck, neurophysiology, patient selection, pharmacological effects and contraindications, management of complications, informed consent and hands-on training on the administration of the agents. The training must be offered by a continuing education provider approved by the ADA's Continuing Education Recognition Program, the Academy of General Dentistry's Program Approval for Continuing Education or another nationally recognized and accredited entity approved by the dental board.
- The ADA supports dentists performing any procedure for which they are qualified by education, training and experience and consistent with the laws of the state in which they are practicing. The Association is aware of at least 20 states that have addressed the issue of general dentists administering Botox.
Massachusetts approves Botox policy for dentists
Apr 01, 2013

by k.r. f01.2DUI

ABSHU

Massachusetts dentists can administer Botox and Dysport to patients as part of their routine dental treatment under a new state regulatory policy.

This Massachusetts Board of Registration in Dentistry adopted the policy during its March 6, 2013 meeting. The policy allows licensed general dentists to administer Botox to patients as part of their routine dental care, provided they are certified in the management of Botox and trained in the proper dosage and administration of the drug.

"The policy reflects a change in state regulations to allow for the administration of Botox and Dysport to patients as part of their routine dental care," Dr. Mark Goldstein, the board's executive director, said in a statement.

The policy, effective immediately, is expected to help alleviate the backlog of patients waiting to receive Botox treatments.

Botox and Biosimilars

- Botox (the eponym)
- 1. Abobotulinumtoxin A (Dysport)
- 2. Incobotulinumtoxin A (Xeomin)
- 3. Onabotulinumtoxin A (Botox, Botox cosmetic)
- 4. Rimabotulinumtoxin B (Myobloc)
Botox Mechanism of Action

- Botox® is considered to be in the same class as any injectable; similar to a flu shot
- Mechanism of action:
  - The botulinum toxin is a neurotoxin that acts at the neuromuscular junction. It blocks the release of acetylcholine thereby reducing neuromuscular contractility and function. The effects of the toxin wear off over time (roughly a three month period) as the docking proteins affected regenerate (Small).

Adverse Reactions

- Generally Safe
- Allergic reactions
  - Rash, itching, headache, neck/back pain, muscle stiffness, difficulty swallowing, short of breath
  - Nausea, vomiting, sore throat
- Spread to distant site (Black box warning)
- Ptosis
Contraindications

- Pregnancy/lactation (Class C)
- Allergy to any of the Botox constituents
  - Egg protein allergy (Albumin in drug has crossreactivity)

- Drugs that can interact
  - Aminoglycosides
  - Anticholinergic drugs (other drugs affecting neuromuscular transmission)
  - May potentiate the effect of Botox

- Neuromuscular diseases
  - Myasthenia gravis
  - Guillain-Barre Syndrome
  - Amyotrophic Lateral Sclerosis

- Psychologically unstable patients
Applications

- Botox injections have been recommended in dentistry to alleviate:
  - TMD (especially helpful for myofascial pain),
  - Bruxism,
  - Oromandibular dystonia,
  - Mandibular spasm,
  - Pathologic clenching,
  - Trismus prevention,
  - An adjunct for dental implant integration,
  - To correct gingival excess ("gummy smile")
  - Masseteric hypertrophy (Nayyar et al.).

Applications Continued

- Other applications (to include both on and off label use):
  - Wrinkle prevention
  - Overactive bladder
  - Urinary incontinence
  - Upper limb spasticity
  - Cervical dystonia
  - Severe axillary hyperhidrosis (excess sweating)
  - Bilateral spasm (torticollis)
  - Strabismus (squinting)
  - Sialorrhea and other secretory disorders
  - Facial nerve palsy
  - Headaches (important to note: new onset or change should be discussed with neurology in order to rule out any underlying pathology such as tumors etc.)
  - Trigeminal neuralgia
  - Facial trauma
  - Adjunct to orthodontic treatment
  - Adjunct in denture patients (Srivastava et al.)
Conclusion

- We have a responsibility to be excellent for our patients
- Dentists have an excellent foundation
  - With appropriate training can provide excellent service
    - Understand pharmacology, anatomy, administration, and complications
- I recommend requiring training as other states have done and as PIE requires
  - 8-10 hours of hands on CE for Botox and Dermal fillers
  - Supportive statement from the board as that from the Massachusetts state board to reduce liability and make it easier to acquire the medications.
Works Cited

dentists/2013/09/2013

Additional information from Canada: http://news.macleans.ca/economy/business/bruised-lips-and-botox/

Even more Canadian info: https://www.cdsbc.org/practice-resources/professional-practice/information-sheets/insert-and-dermal-fillers/schedule-of-dates


Additional state by state resource guide: https://www.empiremedicaltraining.com/website/docs/dental/regulations.pdf
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