ROLE OF THE DENTAL HYGIENIST IN THE TREATMENT OF TEMPOROMANDIBULAR DISORDERS

- Patient education about temporomandibular disorders, and how it affects their health.
- Provide patients different options on how to treat temporomandibular disorders and guide them in the process.
- Refer patient to a licensed dentist or specialist to treat the condition.
- Take steps to help improve patient's quality of life.
- Some states in the United States are already allowing Dental Hygienists to administer facial Botox injections.



NEW YORK CITY COLLEGE OF TECHNOLOGY

References:

- Hyun-Suk Kim, P. (2016, January 28). A clinical evaluation of botulinum toxin-A injections in the temporomandibular disorder treatment. Retrieved from <u>https://jkamprs.springeropen.com/articles/10.1186/s409</u> 02-016-0051-7
- Botulinum toxin injection for management of temporomandibular joint clicking. (2013, March 26). Retrieved from <u>https://www.sciencedirect.com/science/article/pii/S090</u> 1502713000751
- Improvement in quality of life after botulinum toxin injection for temporomandibular disorder. (2018, October 29). Retrieved from <u>https://www.sciencedirect.com/science/article/pii/S246</u> 8785518302180
- Raphael, K. G., Tadinada, A., Bradshaw, J. M., Janal, M. N., Sirois, D. A., Chan, K. C., & Lurie, A. G. (2014, May 17). Osteopenic consequences of botulinum toxin injections in the masticatory muscles: A pilot study. Retrieved from

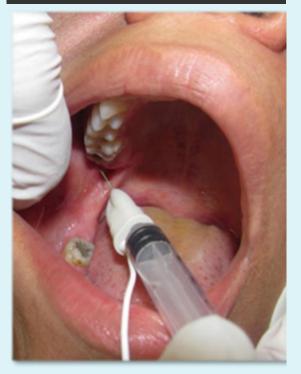
https://onlinelibrary.wiley.com/doi/abs/10.1111/joor.12 180

Pictures:

- <u>https://www.northpierdental.com/our-services/botox-tmj-disorder</u>
- 2. <u>https://www.medicinenet.com/temporomandibular_joint</u> <u>syndrome_tmj/article.htm#temporomandibular_joint_t</u> <u>mj_syndrome_facts</u>

How Botox Benefits the Temporomandibular Junction

INJECTION OF BOTOX IN THE TMJ



Presented by: Carolina Fritman Ivy Lin Keren Reyes

WHAT IS TEMPOROMANDIBULAR DISORDERS (TMD)?

- Temporomandibular disorder is a muscle and joint disorder that involves pain and dysfunction in the masticatory muscles and joints. It is a very common condition in the United States affecting 10-12% of the general population.
- Multiple factors contribute to the muscle tightness and dysfunction that characterize this condition. It is not clear whether some of these causes directly lead to TMJ syndrome or if they are a result of the disorder.



HOW BOTOX WORKS?

- Botox is a neurotoxic protein that is used to decrease muscle contractions by blocking the release of acetylcholine.
- Botox injections are reported to be effective as a first-line therapy for the treatment of temporomandibular disorder.

BENEFITS OF BOTOX IN THE TREATMENT OF TMD

- Botox has been used to treat a wide variety of medical conditions such as muscular spams and temporomandibular disorders.
- Botox helps to relieve symptoms such as jaw tension, bruxism and even stress.
- Exhibits immediate effects such as relief of jaw pain, better mobility of the mouth, ability to open the mouth wider and helps stabilize the clicking of the temporomandibular junction.
- In addition, Botox is also widely used for cosmetic procedures and it is commonly used on people with severe headaches and migraines.
- It helps to improve the quality of life (QoL) of patients who suffer from the symptoms of TMD. Patients in a QoL study, reported that injection of Botox on their TMJ helped them to facilitate daily activities like having a conversation, eating, sleeping, and recreational activities – thus improving their QoL.
- An alternative therapeutic treatment for those who don't want to go through surgical or invasive procedures and those who don't want to wear removable appliances.

TMJ Symptoms Headaches/Migraines Ear Pain or Tinnitus Dental Damage

LIMITATIONS OF BOTOX

- Some limitations to keep in mind is that Botox is a semi-permanent treatment therapy. Since the effects last 3-6 months, it depends on the person and how fast their body breaks down the toxin.
- Another contraindication from Botox, it's that prolonged use may result in the reduction of cartilage or tissue thickness.
- This procedure can be costly as it is priced from \$8-\$15 per unit with an average of 40 units needed per treatment.
- Not all dentists are licensed to perform Botox filler procedures.
- Some side effects after the injection is bruising, numbing, and difficulty speaking.
- This procedure is not covered by most insurances and could be an out of pocket expense.