TEMPORAMANDIBULAR DISORDERS TREATED SUCCESSFULLY WITH INCOBOTULINUMTOXINA

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INTRODUCTION AND OBJECTIVES

Temporomandibular disorders (TMD) are a common cause of pain in the orofacial area. Myofascial pain and mouth opening limitation are the most frequent symptoms leading to masseter hypertrophy, headache, periodontal disease, TMD joint destruction and tooth wear. The etiology of TMD, including bruxism, is not well understood and is associated with numerous causes.

There is some evidence supporting the use of botulinum toxin A (BTX-A) injection on orofacial muscles becoming a valuable adjunct in managing TMD, particularly in cases involving muscular (masseter and temporal muscles) hyperactivity as bruxism (1).

BTX-A works by blocking the release of acetylcholine at the neuromuscular junction causing temporary muscle paralysis (2). Weakness of targeted muscles usually lasts between 1 and 6 months.

Herein, we present two cases of patients with TMD and myofascial pain dysfunction syndrome, associated to bruxism, who were treated successfully with IncobotulinumtoxinA (IncoBTX-A).

PATIENTS AND METHODS

We treated 2 female patients, both diagnosed of TMD and myofascial syndrome with marked bruxism and pain. Each patient had two injection sessions of IncoBTX-A bilaterally in the masseter, pterygoids and temporalis muscles to treat their jaw-closing dystonia. In the presented cases, IncoBTX-A was injected into each masseter, pterygoids and temporalis muscle (Fig. 1) on both sides (total dose: 75-150 U). Approximately 3-4 weeks after the injections, patients returned for reevaluation and documentation of any adverse effect. The improvement after each treatment was also evaluated at the patients at follow up visits (3 months after injections) by a Visual Analogue Scale (VAS) ranging from 0 (no improvement) to 10 (total improvement).

RESULTS

- The first patient had two injection sessions of a total of 150 U of IncoBTX-A each into the bilateral masseter, temporalis and medial/lateral pterygoids (25 U/2 injection points per muscle). At the follow up visits, the patient referred an improvement of 8 points in TM myofascial pain and discomfort according to the above mentioned scale. This patient did not report any adverse effect.
- The second patient received 75 U and 100U IncobotulinumtoxinA injections at each visit, respectively, into the masseter and pterygoids muscles. The patient improvement was rated as of 7 points in the VAS. Mild and transient palatal paresthesia, twangy voice and dysphagia were reported as adverse effects for this patient.
- In both cases clinical improvement was reported at 3-4 weeks (first postinjection visit) and persisted at assessment 4 months post-treatment

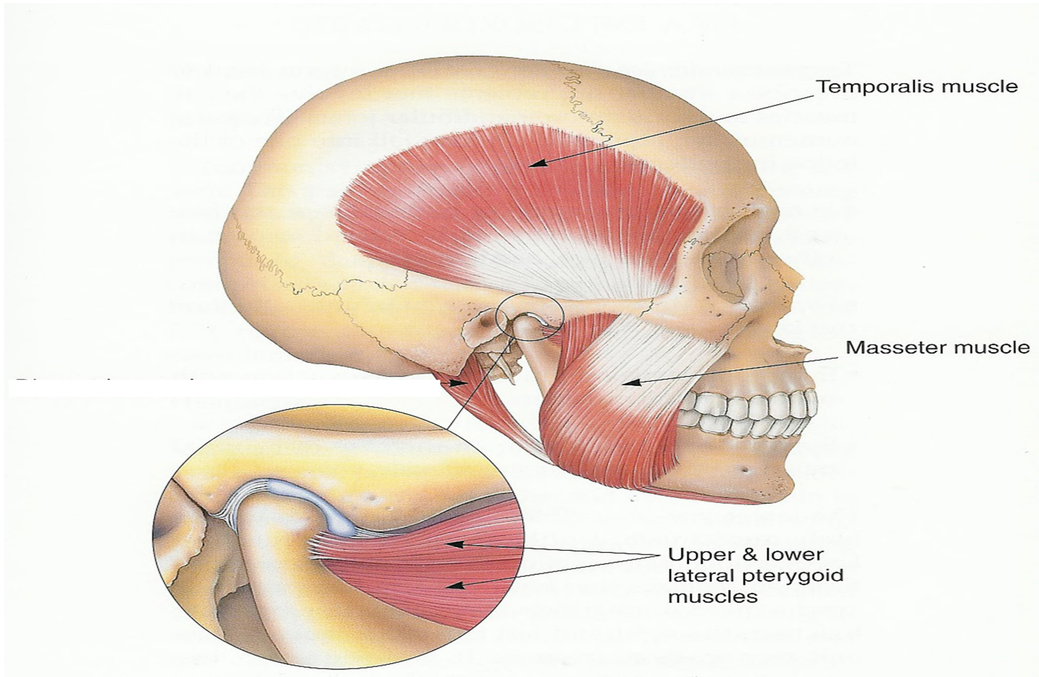

Figure 1: Muscles injected in the patients

CONCLUSIONS

- TMD is a common cause of chronic facial pain and is known to interfere with personal and professional relations and duties, and overall quality of life.
- Generally, in the treatment of bruxism the masseter, pterygoid and temporalis muscles are assessed during clinical evaluations and injected with BTX-A bilaterally.
- In our experience, IncoBTX-A treatment in the masticatory muscles may be an easy, efficient and well-tolerated treatment for TMD, improving pain and mandibular functions, representing an alternative to other medical or behavioral interventions.
- Nevertheless, large controlled trials are necessary to confirm this treatment benefit.

REFERENCES

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