



AESTHETIC AND COSMETIC DERMATOLOGY (LASERS SEPARATE CATEGORY)

THE ROLE OF THE MASSETER IN FACIAL CONTOURING, QUALITY OF LIFE, AND AGING

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Background: Masseter muscle hypertrophy can be associated with square shaped lower face, pain, dental attrition, maxillary and mandibular bone resorption, and accelerated aging process of the lower face.

Objective: To assess efficacy and safety of botulinum toxin type A (BTX-A) in treating the masseter muscle.

Materials and Methods: A MEDLINE search was performed to identify articles investigating masseter treatment with BTX-A.

Results: BTX- A can be injected in the lower posterior aspect of the masseter muscle, below imaginary line connecting the ear lobe to the oral commissure and between the palpable posterior border of the masseter and 1 cm posterior to the palpable anterior border of the muscle. Multiple injection points in each masseter muscle are preferable to a single injection point as they result in a more uniform and harmonious reduction of the muscle. Treatment dosage varied between 10 and 40 units of onabotulinum toxin- A (ONA), and 100-300 units of abobotulinum toxin A (ABO) into each masseter. Treatment decreases muscle bulk and reshapes the lower face. Furthermore, patient quality of life measures, including pain and symptoms of grinding and clenching are improved. Treatment can decrease shear stress on maxillary and mandibular bones and can prevent progressive bone resorption of the lower face. It is estimated that the reduction of muscle volume peaks in 1-2 months after treatment and returns to baseline in 6 months. Symptom relief and patient satisfaction can last longer than 6 months. Treatment should be avoided in patients with significant laxity of the skin of the lower face. Adverse effects reported with this treatment are minimal and self-limiting.

Conclusions: BTX-A provides a reliable and a relatively safe option for contouring the lower face. It provides relief from clenching and grinding habits, and reduces bone resorption and thus aging of the lower face.

