



AESTHETIC AND COSMETIC DERMATOLOGY (LASERS SEPARATE CATEGORY)

EFFECT OF BOTULINUM TOXIN TYPE A ON THE HEALING OF FACIAL SKIN BIOPSIES - SERIES OF CASES

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Background: Unsightly scars are complication in the healing process after a tissue injury. Effective prevention and treatment of these scars is a challenge. Botulinum toxin A (BTAX) causes chemoimmobilization, which reduces the tension decreasing the microtrauma in the healing process and subsequently the local inflammatory response, with a lower expression of cytokines and transforming growth factor $\beta 1$.

These effects lead to earlier maturation of the new collagen.

Observation: We compared a serie of cases of healing after punch 6 mm biopsies performed on the ipsilateral periorbital and preauricular areas at the same time. After approval by the Committee of Ethics (2016), 14 women from the dermatology outpatient department were included. The participants had 2 punch 6 mm biopsies taken at the same time from the periorbital and preauricular area of the same side of the face. Immediately after suturing, BTXA was applied only to the periorbital regions. The mean age of the participants was of 61 years (55-65 years), and they all had phototypes III or IV. The BTXA used was abobotulinumtoxin A 300 U diluted in 1 ml saline 0.9%. Ten units were injected into each periorbital region, with a distribution of 3 U in the upper third, 4 U in the middle third and 3 U in the lower third of the lateral orbicular muscle (upper edge and lower edge of the scar, respectively). Three months later, the parameters width and visual scoring scale according to The Global Aesthetic Improvement Scale of the scars were assessed by the investigator, by an external observer and by the participants, comparing the scar on the periorbital region to the one on the preauricular region.

Key message: The aspect of the scar it was better in the treatment area with toxin, however, more studies should be conducted.

