



AESTHETIC AND COSMETIC DERMATOLOGY (LASERS SEPARATE CATEGORY)

A SINGLE-BLIND, SPLIT-FACE, RANDOMIZED CONTROLLED TRIAL COMPARING INTRADERMAL INJECTION OF ONABOTULINUM TOXIN VERSUS INTRAMUSCULAR INJECTION FOR FOREHEAD LINES.

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Background: The standard application of botulinum toxin for horizontal forehead lines is done intramuscularly (IM). Some authors have suggested that the combination of the intradermal application (ID) may provide a more natural result, avoiding an overly paralyzing result of isolated IM use.

Objective: To establish if the paralyzing effect of the onabotulinum toxin type A on the forehead lines applied intradermally is as effective as that of the same toxin applied intramuscularly in 48 hours, one week, two, four, 12 and 24 weeks for the treatment of forehead lines and compare pain tolerance of both possibilities.

Materials and Methods: 16 patients with frontal lines were randomized to receive IM or ID onabotulinum toxin and were reevaluated within 48 hours, one and two weeks, 1.2 and three months. A single investigator applied toxin to the frontal region in all participating patients, IM form on one side and on the other side applied the same amount of the substance form ID. Three blinded assessors assessed patients' photos and videos. The categorical variables were compared between the treatments by the McNemar test and the quantitative ones by the Wilcoxon test. A significance level of 5% was considered for the established comparisons. The project was approved by the Ethics Committee of the Santa Casa of Porto Alegre.

Results: Data were collected from 16 patients. The mean age was 33 years (SD 5.96). In two weeks, paralysis occurred in 93.3% on the IM side and 53.5% on the ID side ($p = 0.07$). The median pain score was 2 on the IM side and 3 on the ID side ($p = 0.072$).

Conclusions: although the percentage of the presence of paralysis was higher in the IM





group in all evaluations, there was no statistically significant difference between the sides.

