

Botulinum toxin A: Successful Décolleté Rejuvenation

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Background:

Botulinum toxin is a safe and effective modality for the temporary diminution of undesired expressive mimic facial and neck wrinkles. Beginning with the age of 35 years, wrinkles develop in the upper, middle and lower décolleté. With advancing age of 50, vertical V-shaped folds, horizontal fold reliefs and, in some cases, fan-shaped folds in the upper, middle and lower décolleté can persist and often are perceived to be cosmetically disturbing (1,5).

We hypothesized that these wrinkles are induced by platysma movement and different platysma muscle extensions. Therefore blocking the muscular activity with Botulinum toxin A (BT-A) should be effective because this substance is already used for the treatment of platysma banding and mimical facial wrinkles.

The décolleté regions of 10 patients were treated with BT-A, depending on contraction of the platysma muscle.

In all patients with platysma-induced décolleté wrinkles the BT-A injections achieved an effective muscle relaxation and a cosmetically satisfying smoothing of the décolleté region.

Objective:

Platysma movement showed different muscle extensions, with variants extending to above the clavicle and the second intercostal space. This observation is in line with Bergmann et al. describing 24 anatomical variants of the platysma (2).

Our 10 patients were treated in the décolleté region. An individually adapted injection scheme, depending of the platysma contraction was used. Subcutaneous injections were performed with 15 units of BT-A (Dysport®) per injection site (3).

Results:

In 7 patients V-formed and horizontal folds occurred in three regions of the décolleté. Within two weeks after injection a clear smoothing of these décolleté wrinkles was observed.

In 2 patients with actinic elastosis BT-A injections were not able to significantly improve the associated wrinkle formation.

One patient had developed wrinkles in the middle and lower presternal part of the décolleté after silicon augmentation of the breasts. In this patient, BT-A did not lead to a satisfactory smoothing.

In summary, BT-A injections were able to exclusively improve muscular-induced décolleté folds, whereas actinic or gravity-induced wrinkles could not be treated satisfactorily (1, 4, 5).

Conclusion:

These data indicate that Botulinum toxin A injections should be considered as a novel useful tool for the rejuvenation of the aging décolleté.

Literatur:

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- Bergman, R., Afifi, A., Miyauchi, R.: Variations in the Platysma Muscle. *Illustrated Encyclopedia of Human Anatomic Variation: Part 1: Muscular System* <http://www.vh.org/Providers/Textbooks/AnatomicVariants/Images/0235.html>
- Becker-Wegerich, P. M., Rauch, H., Ruzicka, T.: Botulinum toxin A: Successful décolleté rejuvenation. *Dermatol Surg* 2002; 28 (2) : 168-71.

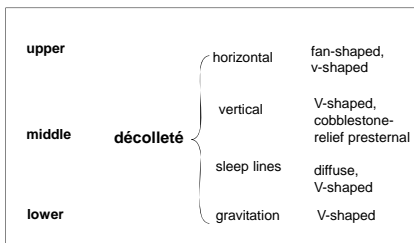


Fig. 1: Types of wrinkles in the décolleté region

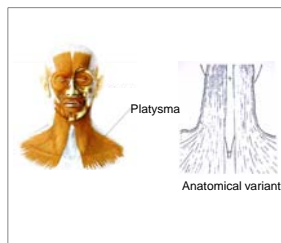


Fig. 2: Anatomy of the platysma and an anatomical variant

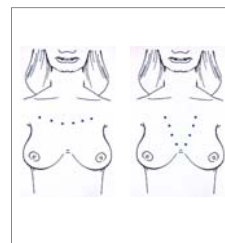


Fig. 3: Injection scheme: 15 U BT-A (Dysport®) per injection site

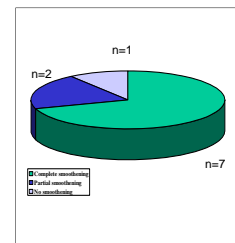


Fig. 4: Result of the smoothing effect and tightening of platysma muscle

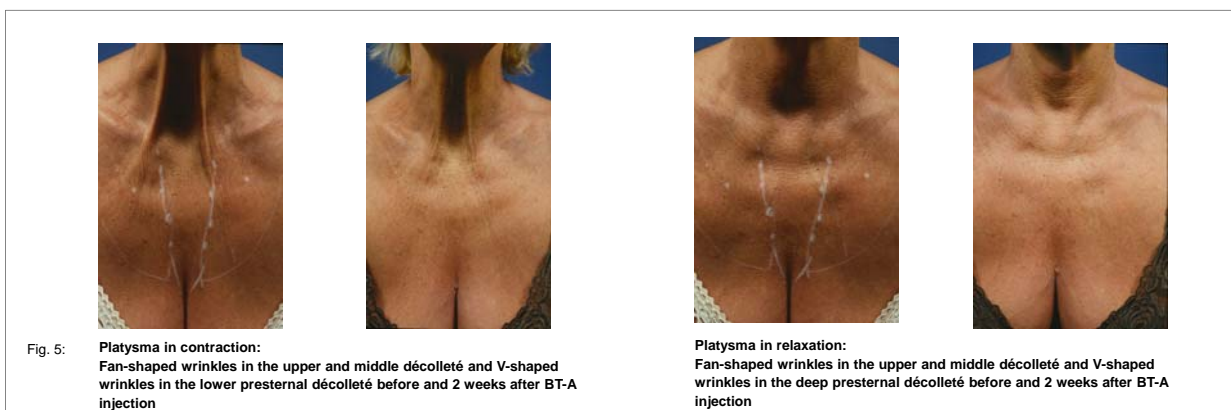


Fig. 5: Platysma in contraction: Fan-shaped wrinkles in the upper and middle décolleté and V-shaped wrinkles in the lower presternal décolleté before and 2 weeks after BT-A injection

Platysma in relaxation: Fan-shaped wrinkles in the upper and middle décolleté and V-shaped wrinkles in the deep presternal décolleté before and 2 weeks after BT-A injection