

## THE THERAPEUTIC COSMETIC USE OF BOTULINUM TOXIN IN THE POST-SURGICAL SCAR REGION IN PATIENTS UNDERGOING HEAD AND NECK SURGERY

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## INTRODUCTION

Scars are a major cause of concern for patients undergoing head and neck surgery. Unfortunately, these are inevitable consequences after surgical procedures. The muscular tissue, with its nervous connections, and the skin tissue of the face promote continuous tension on the surgery region, compromising the expected aesthetic results, such as tension reduction, changes in collagen deposition and fibroblast differentiation (1,2). Therefore, the use of botulinum toxin (TB) when applied to areas that are in the process of facial skin healing appears to be a good option to optimize the healing process, as it reduces tension on the edges of the wound, providing a better aesthetic result(2–5).

## OBJECTIVE

To evaluate the influence of applying TB in the postoperative period of skin tumor excision, thyroidectomy and left lobectomy, in order to prevent unsightly scars.

## REPORT

The present study reports three cases that aim to describe the results obtained from post-surgical treatment submitted to the application of TB, carried out at the Integrated Head and Neck Surgery Center of Florianópolis-SC (NICAP). The first case, a 44-year-old male patient, presented with a Bethesda VI category thyroid nodule, in which a total thyroidectomy with bilateral neck dissection was performed. After 17 days post-surgery, a total of 50 IU of TB was applied to the edges of the surgical incision, with the application of 4 IU per cm<sup>2</sup>.

In the second case, a 59-year-old female patient presented with a Bethesda VI category thyroid nodule, a left lobectomy was performed, 7 days post-surgery, 20 IU of TB was applied to the edges of the surgical incision, with 5 IU being applied. per cm<sup>2</sup>.

In the third case, a 36-year-old female patient, presented with nodular basal cell carcinoma (BCCN) in the left zygomatic region, excision and reconstruction with a rhomboid flap were performed, after 10 days post-surgery, 10 IU of TB was applied to the edges. of the skin flap, with 4 IU per cm<sup>2</sup>.

## DISCUSSION

By using botulinum toxin in three patients who had different ages, sex and pathologies in different areas of the face and neck, we demonstrated satisfactory results in terms of healing, thus demonstrating the versatility of using TB in post-surgical treatment, both in the improvement of the scar area and in the ease on the part of surgeons in using TB in the clinic (4,6). Can be used in all scar treatments in general, such as head and neck surgeries.

## CONCLUSION

The application of TB in post-surgical procedures does not present adverse effects such as delayed healing time, but rather, it presents excellent aesthetic results, improving the structure and appearance of the scar, reducing the chances of formation of fibrosis and keloids in the head region and neck, bringing better aesthetic results to the patient.



First Case



Second Case



Third Case

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