

# Nasolabial flap for upper lip reconstruction.

## A case report

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Case Report

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### Background

We present a clinical case of a 73-year-old female patient with a lesion on the upper lip of 15 mm. A resection of the lesion is performed leaving margins of 5 mm, with a histopathological diagnosis of basal cell carcinoma. A nasolabial rotation flap was made of approximately 30 mm in diameter. She went for a check-up after 2 weeks with adequate healing, the sutures were removed and the results were recorded 4 weeks after surgery. The general measures to take into account for the reconstruction of the upper lip are in relation to preserving its functionality and aesthetics. The surgeon should avoid horizontal scars by making incisions following the tension lines of the relaxed skin or wrinkles. The nasolabial flap provides a lot of variations that can be used depending on the size and localization of the lesion. This flap is an excellent option for facial reconstruction after oncologic surgery, and in this case, a very good aesthetically and functional result.

**Keywords:** Nasolabial flap, Basal Cell Cancer, Lip Reconstruction.

Lip cancer is a rare pathology, its prevalence is around 1-2% of which 60% corresponds to the lineage, therefore it is the most frequent presentation of lip cancer. The treatment of lip cancer will depend on the characteristics of the tumor, whether benign, malignant, or metastatic, with surgical management in most cases. In cases of large tumors in the upper lip, reconstruction using flaps is chosen since there may be oral incontinence and aesthetic alterations after resection (1). The general measures to take into account for the reconstruction of the upper lip in relation to preserving its functionality and aesthetics should be to maintain the symmetry of both the nasolabial fold and the upper lip, respect or reconstruct the philtrum and try not to displace them. , avoid folds at the junction of the skin with the vermilion, avoid superior traction of the vermilion and avoid horizontal scars by making incisions following the tension lines of the relaxed skin or wrinkles (2).

### Case report

It was a 73-year-old female patient with a history of diabetes mellitus 2 and systemic arterial hypertension of 15 years of evolution with a body mass index of 37, which arrives with a lesion on the lip 3 cm from the right corner of the mouth which has a diameter of 15 mm. A resection of the lesion is performed leaving margins of 5 mm, with a histopathological diagnosis of basal cell carcinoma, negative margins are confirmed. Marking is performed for the creation of a nasolabial rotation flap of

approximately 30 mm in diameter, dissection of the plane by subcutaneous plane, rotation and closure are performed with 3-0 polyglycolic acid suture, and closure with 3-0 nylon simple stitches, with adequate tension and without complications. She went for a check-up after 2 weeks with adequate healing, the sutures were removed, and the results were recorded 4 weeks after surgery.

### Discussion

Lip cancer was found to be the second most frequent skin cancer in the head and neck region. The high visibility of the lips allows for the early diagnosis and treatment of any developing malignancies, resulting in good prognosis with a nearly 100% cure rate. Accurate diagnosis requires a tissue biopsy and subsequent histopathological examination of the lesion (1). This tissue sample could be obtained with a needle biopsy and/or surgery, using a variety of flaps to cover the area of the lesion. It seems that surgical removal through either excision or MMS (Mohs micrographic surgery) is effective for clearing the malignancy (3). One of the most used flaps in facial reconstruction is the nasolabial flap. The versatility and usefulness of the nasolabial flap is well known. The flap has a good vascular supply; hence, survival is high (4). The ease of harvest, robust blood supply, and versatility of the nasolabial flap lends itself to multiple applications. The nasolabial flap may be used as a random or axial pattern flap and can be pedicled superiorly or inferiorly. Although this flap has a very good

From the Department of Surgery. Hospital General 5 de Diciembre, ISSSTE Mexicali, México. Received on October 12, 2023. Accepted on October 13, 2023. Published on October 16, 2023.



**Figure 1.** Anterior and lateral view of the lesion localized in the upper lip.



**Figure 2.** Picture shows patient 4 weeks after tumor resection.

functional result, it has a variable aesthetic repercussion. Most of the patients that underwent this type of surgery has an acceptable but not imperceptible result. The most dreaded complication of the nasolabial flap is vascular compromise and flap failure (5). Nasolabial region is a hair bearing region of the face, especially over the lower end of the fold. Flaps harvested from this site will not be devoid of hair and it can be concerning in male patients (6). Even with this situation, the nasolabial flap remains as one of the most used and effective flap concerning to facial reconstruction after oncologic surgery.

### Conclusion

The presentation of this case represents a good example of the usefulness and effectiveness of the nasolabial flap in the facial reconstruction. The basal-cell carcinoma has a highly importance due to its prevalence. When is localized in the lips can be diagnosed and promptly treated if the patient undergoes with professional healthcare personnel that can recognize its presence. The first and probably most important step in the treatment of the basal-cell carcinoma is surgery. The surgical treatment implies tissue removal, and when is localized in the face, has a higher importance due to the aesthetic implication. The nasolabial flap provides a lot of variations that can be used depending on the size and localization of the lesion. It has a low complications rate when the surgery is made by an experience surgeon. This flap is an excellent option for the facial reconstruction after oncologic surgery, and in this case, a very good aesthetically and functional result.

### Conflicts of interests

The authors declare no conflict of interest.

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