

Case report

Reconstruction of the nasal tip with a graft unilateral myocutaneous pedicle's graft

Reconstrução da ponta nasal por retalho de pedículo mio-cutâneo unilateral

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ABSTRACT

The technique of reconstructing defects on the nasal tip poses a challenge in dermatologic surgery due to the restricted amount of skin in the area and the limited mobility of adjacent areas. This report demonstrates that it is possible to use adjacent skin to re-cover the defect using a unilateral myocutaneous pedicle flap, which allows greater movement and does not distort the nose's symmetry.

Keywords: surgical flaps; nose; skin transplantation.

RESUMO

A técnica de reconstrução de defeitos localizados na ponta nasal é desafiadora para a cirurgia dermatológica pelo fato de haver pouca pele adjacente disponível e limitada mobilidade. Este relato demonstra que é possível mobilizar a pele adjacente para recobrir o defeito usando retalho com pedículo mio-cutâneo unilateral que permite maior movimentação e não distorce a simetria do nariz.

Palavras-chave: retalhos cirúrgicos; nariz; enxerto de pele.

INTRODUCTION

The nasal tip is frequently the site of different types of cutaneous cancers, and its reconstruction poses a challenge for dermatologic surgeons. The scarcity of skin in the area, in addition to its limited mobility, complicates the use of standard flaps. Total skin grafts may yield good results, however there is risk of depressed scars, dyschromias and modifications in the nose shape. The results obtained with pedicle flaps are always superior to those obtained with grafts, due to the absence of such risks, except for asymmetry. Several other types of flaps, among which we highlight the V-Y subcutaneous flap and its variants, have been studied with the intention of repairing nasal defects¹.

The myocutaneous pedicle flap was originally described by Rybica^{2,3} in 1983, with the analysis of 47 patients. The described technique is based on the nasal muscle, which is supplied by the lateral branch of the angular artery. In 1987, Constantine⁵ employed a similar reconstruction technique for defects up to 1.5cm, with results later described by other authors⁴. Defects with diameters of up to 1.25cm can be reconstructed with a single flap, while bilateral flaps are employed in

those with diameters up to 2cm. For diameters in excess of 2cm, similar methods have been developed using V-Y myocutaneous flaps that move vertically.

METHODS

Four patients with basocellular carcinoma in the nasal dorsum were selected and confirmed by histopathologic examination to receive flaps of myocutaneous pedicle. The patients did not present comorbidities that contraindicated the surgical procedure and declared not having had previous surgeries in the site. Before planning the reconstruction, the lesions were assessed for their size, depth and location.

SURGICAL TECHNIQUE

– Local anesthesia with lidocaine to 1% or 0.5%, adrena-

line the 1:200,000 and 1ml of sodium bicarbonate to 8.4% for each 10ml of solution.

- Exeresis of the lesion observing indicated margins (Figure 1).
- Marking of the myocutaneous flap in the shape of a triangle in the upper region with violet gentian (Figure 2).
- Subdermal detachment on the side of the muscle to be used as pedicle. On the opposite side, the muscle is sectioned to increase mobility (Figure 3). The displacement is made according to the level of (physical) approach required.
- Positioning of the triangle shaped myocutaneous flap with the base turned to the nasal tip.
- Sutures with mono nylon 4.0 thread, starting by the secondary defect and the placement of two key intradermal sutures that can be buried stitches or triple corner stitches.



Figure 1 - Marking the margins of the basocellular carcinoma



Figure 2 - Drawing of the cutaneous muscle flap, in the shape of a triangle, in the area above the place of exeresis of the lesion



Figure 3 - Subdermal detachment on the side where the muscle was used as a pedicle

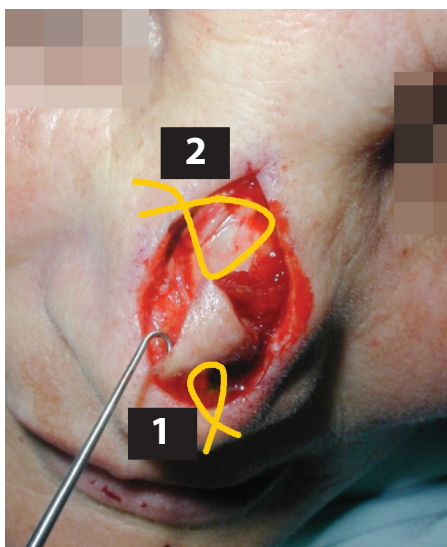


Figure 4 - Positioning the flap for the suture of the two key stitches: one in the base of the triangle and the other on the apex



Figure 5 - Final sutures of the myocutaneous flap

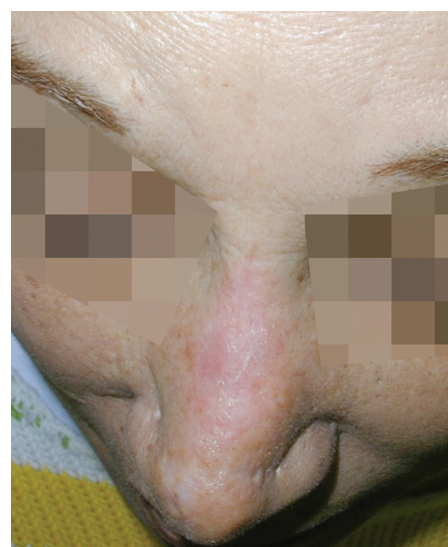


Figure 6 - Final result after three months

- 1st stitch: the thread is passed through the skin of the tip of the nose, in the dermis of the central area of the base of the flap, and then again through the skin

- 2nd stitch: As there is a natural tendency for the flap to retract, it is important to avoid excesses in the traction during the second stitch that may lead to areas of strain, which may form depressed scars in the middle region of the nose. With the aid of a hook, the apex of the triangle is moved by traction from above, and the thread is passed through the skin of the first side, then through the dermis of the tip of the triangle, and then through the skin of the other side (Figure 4).

- The external suture is accomplished with thread 50, in interrupted stitches (Figure 5).

RESULTS AND DISCUSSION

The reconstruction of surgical defects of the nasal tip poses a challenge due to the high risk of distortion of the symmetry of the nose. The described myocutaneous flap in V-Y allows repairs, in a single surgery, with great blood supply and rare complications. Willey and others evaluated 64 patients and demonstrated that the technique can also be used in the nasal wing, in the area above the nasal tip and in the lateral area of the nose. Those authors concluded that complications are uncommon, registering one hemorrhage case, two cases of infection and one case of scarring in the alar region ⁵. In our study there was one case of epitheliolysis with complete recovery.

CONCLUSION

The flap of myocutaneous pedicle has excellent aesthetic and functional results (Figure 6). It is a technique that can replace grafts and other repair types in a single surgery, with optimum aesthetic results and limited risk of distortion of nasal symmetry. ●

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