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 defects.

The myocutaneous pedicle flap was originally described by Rybica 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, Constantine employed a similar reconstruction technique for defects up to 1.5 cm, with results later described by other authors. Defects with diameters of up to 1.25 cm 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%, adrenaline 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. 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.