RECONSTRUÇÃO COMPLEXA DE DEFEITO DO TERÇO INFERIOR DO NARIZ

Guida Santos¹, João Goulão²

¹Interna do Internato Complementar de Dermatologia e Venereologia/Resident, Dermatology and Venereology; Serviço de Dermatologia, Hospital de Santo António dos Capuchos, Lisboa, Portugal ²Especialista de Dermatologia e Venereologia/Consultatnt, Dermatology and Venereology; Serviço de Dermatologia, Hospital Garcia de Orta, Almada, Portugal

RESUMO – A reconstrução de defeitos nasais deve preservar a integridade das funções e expressões faciais. A localização do tumor, o tamanho, as camadas atingidas e a disponibilidade de tecido dador devem ser considerados, de modo a estabelecer o procedimento cirúrgico adequado. Em qualquer reconstrução nasal, é necessário ter em conta

três camadas: revestimento interno, suporte cartilagíneo e revestimento externo.

Os autores descrevem a reconstrução de um defeito de espessura total do terço inferior do nariz após excisão de carcinoma basocelular recidivado, com retalho septal mucoso ipsilateral para a reconstrução do revestimento interno, enxerto livre de cartilagem auricular para o suporte cartilagíneo e retalho de transposição nasogeniano para o revestimento externo, num único tempo cirúrgico e com resultado estético e funcional final aceitável.

PALAVRAS-CHAVE – Reconstrução nasal; Enxerto cartilagíneo; Revestimento mucoso; Retalho de transposição nasogeniano; Carcinoma basocelular.

COMPLEX RECONSTRUCTION OF DEFECT OF THE LOWER THIRD OF THE NOSE

ABSTRACT – Reconstruction of nasal defects must preserve the integrity of complex facial functions and expressions, as well as facial symmetry and a pleasing aesthetic outcome. The localization and size, the anatomical layers involved and the donor tissue availability must be considered in order to establish the indication of the proper surgical procedure. In any nasal reconstruction, it is necessary to take into account three layers: internal lining, cartilaginous framework and external covering.

The authors describe the reconstruction of a full-thickness defect of the left lower third of the nose after excision of a recurrent basal cell carcinoma, with ipsilateral septal mucosal flap for reconstruction of the internal lining, free auricular cartilage graft for reconstruction of cartilaginous framework and nasolabial transposition flap for the external coating, in a unique surgical procedure and with acceptable functional and aesthetic final results.

KEY-WORDS - Rhinoplasty; Nose deformities, acquired; Surgical flaps; Carcinoma, basal cell.

Conflitos de interesse: Os autores declaram não possuir conflitos de interesse. No conflicts of interest. Suporte financeiro: O presente trabalho não foi suportado por nenhum subsídio ou bolsa. No sponsorship or scholarship granted.

Direito à privacidade e consentimento escrito / Privacy policy and informed consent: Os autores declaram que não aparecem dados de doentes neste artigo. The authors declare that no patients' data are shown in this article.

Recebido/Received – Janeiro/January2013; Aceite/Accepted – Fevereiro/February 2013

Correspondência

Dr.ª Guida Santos Serviço de Dermatologia e Venereologia Hospital Santo António dos Capuchos Alameda Santo António dos Capuchos 1169-050 Lisbon Tel.: +351 213136300 Email: guidadossantos@gmail.com

INTRODUCTION

The prevalence of skin cancer involving the nose as well as its increased incidence render nasal reconstruction as one of the most common challenging surgical procedure^{1,2}. Given the vital functions of the nose, it is extremely important that the reconstruction of facial defects preserves the integrity of complex facial functions and expressions^{1,3}. The function of the nose must be maintained by replacing the cartilaginous framework and the mucosal lining, never compromising a patent airway^{1,3}. Re-establishing the framework in nasal reconstruction is critical to achieve form and function. Numerous flaps have been designed to provide coverage of a variety of nasal defects.

CASE REPORT

We describe a 72-year-old male patient who was observed with a relapse of basal cell carcinoma located on the lower third of the nose. The tumor was infiltrated, with centrally ulcerated plaque, unclearly delimited borders (Fig. 1). The histological analysis of an incisional biopsy was consistent with an ulcerated basal cell carcinoma. The radical excision of the tumor with about 3mm surgical margins and under local anesthesia, provided a full-thickness defect, measuring approximately 2.5cm and occupying several subunits of the nose such as the left soft triangle, portions of the left dorsal sidewall, the tip, the ala and the distal portion of the dorsum (Fig. 2A).

A bipedicle flap of nasal mucosa just superior to the defect was employed to restore the nostril lining margin (Fig. 2B). A free cartilage graft was harvested from the posterior conchal bowl of the ear. The cartilage graft was positioned to create an alar batten anastomosed to the defect (Fig. 2C). The donor site was closed primarily. Then, a nasolabial transposition flap with a superiorly based was realized (Fig. 3). The surgical procedure was performed in a single stage without intercurrences. Postoperative complications were not reported and the nasal function was totally preserved. There were a slightly "dog ear" in the nasal dorsum, but the patient didn't wanted a surgical correction (Fig. 4).



Fig. 1 - Recurrent basal cell carcinoma, ulcerated on the lower third of the nose.



Fig 2 - A) Surgical defect occupying several subunits of the nose; B) Internal lining with ipsilateral septal mucosal flap; C) Free cartilage graft from the concha in position.



Fig 3 - Nasolabial transposition flap.



Fig 4 - Results after 1 month with slightly "ear dog".

DISCUSSION

A basic premise of nasal reconstruction dictates that missing tissue should be replaced with similar tissue harvested from adjacent or remote locations. Accordingly, difficult full-thickness alar wounds often require nasal mucosal replacement for lining, cartilage batten graft support for the preservation of nasal function, and skin coverage for the restoration of an aesthetically proper appearance⁴. Intranasal mucosal flaps are the preferred method for many full-thickness defects because they replace tissue with like tissue. The ipsilateral septal mucosal flap is one of the most frequently used in the inner lining flaps to the bottom third of the nose allowing good vascularization at higher lip artery branch^{1,5}. Thereby, it makes possible the use of primary cartilage grafts from the ear without risk of cartilage necrosis⁵.

Millard has emphasized that the major function of framework is to achieve and maintain profile and patency of the airways. This result was obtained through the auricular conchal cartilage graft which is more used due to its easy access. Numerous skin flaps have been described for nasal reconstruction. The nasolabial flap is a superiorly based transposition flap, ideally suited for reconstruction of small- to medium--sized defects involving the lateral aspect of the nose. Depending on the laxity of the cheek tissue, the width of the nasal wound to be reconstructed with this graft is usually limited to less than 2,5cm⁷. This flap offers many advantages: good color and texture match for nasal tissue, abundant reservoir of tissue laxity from the medial cheek, donor site scar well hidden along the melolabial fold, and adaptability as a single-stage procedure. Furthermore, the skin is usually free of hair

and has an excellent blood supply from the branches of the facial artery. The skin implemented is very similar to that which was present due to its proximity¹. But its underlying fat has a strong tendency to contract. Wounds of the nasal tip or nasal dorsum require a long nasolabial flap and are more likely to develop trapdoor deformity or tip necrosis. For wounds, larger than 2,5cm, other reconstructive options, such as a forehead flap. In this case, a paramedian forehead flap could have been performed but would have needed a two-staged. We emphasize this case because of the good aesthetic and functional results achieved with the combination of ipsilateral septal mucosal flap, free auricular cartilage graft and nasolabial transposition flap, in a unique surgical procedure.

BIBLIOGRAFIA

- 1. Chang JS, Becker SS, Park SS. Nasal reconstruction: the state of the art. Curr Opin Otalaryngol Head Neck Surg. 2004; 12:336-43.
- 2. Laitano F, Lourenço FT, Siqueira EJ, Alvarez GS, Djacir P, Martins E, et al. Use of skin flaps for nasal reconstruction after neoplastic resection. Rev Bras Cir Plast. 2012; 27: 217-22.
- Salgarelli AC, Bellini P, Multinu A, Magnoni C, Francomano M, Fantini F, et al. Reconstruction of nasal skin cancer defects with local flaps. J Skin Cancer. 2011;181093.
- 4. Cook JL. Reconstruction of a full-thickness alar wound with a single operative procedure. Dermatol Surg. 2003;29:956-62.
- 5. Menick F. Lining options in nasal reconstruction. Oper Tech Plast Reconstr Surg 1998; 5(1): 65-75.