Case Reports

Autors:
Guilherme Moraes Kruger[1]
Gabriela Kimie Aseka[1]
Carlos Alberto Ferreira de Freitas[2]
Günter Hans Filho[1]

[1] Hospital Universitário Maria Aparecida Pedrossian (HUMAP), Universidade Federal de Mato Grosso do Sul (UFMS) - Campo Grande (MS), Brazil.
[2] Head and Neck Surgery Discipline, Surgery Department, Universidade Federal de Mato Grosso do Sul (UFMS) - Campo Grande (MS), Brazil.

Reconstruction of extensive lesion in the ear with a "saloon door" flap

Reconstrução de extensa lesão de orelha com retalho em "porta de Saloon"

DOI: http://www.dx.doi.org/10.5935/scd1984-8773.20181011042

ABSTRACT

Basal cell carcinoma (BCC), also known as basal cell epithelioma, is the most frequent epithelial neoplasm in the dermatological practice, being more common in men. The authors report the case of a 75-year-old female patient with a BCC in the concha, anti-helix and triangular fossa regions of the right ear. The lesion was completely excised, including the cartilage. The surgical defect was repaired by means of a "saloon door" flap, which yields good aesthetic and functional outcomes. The posterior auricular flap is a versatile option for partial reconstruction of defects in the ear.

Keywords: Carcinoma, basal cell; Skin neoplasms; Surgical flaps

RESUMO

O carcinoma basocelular, também conhecido como epitelioma basocelular, é a neoplasia epitelial mais frequente em nosso meio, sendo mais comum em homens. Relata-se o caso de paciente do sexo feminino, de 75 anos, portadora de um carcinoma basocelular nas regiões da concha, anti-hélice e fossa triangular da orelha direita, que foi completamente excisado, com inclusão da cartilagem. A reparação do defeito foi feita por meio de retalho do tipo "porta de saloon", com bom resultado estético e funcional. O retalho auricular posterior é opção versátil para a reconstrução parcial do defeito da orelha.

Palavras-chave: *Carcinoma basocelular; Neoplasias cutâneas; Retalhos cirúrgicos*

Correspondence:
Guilherme Moraes Krüger
Av. Afonso Pena, 4730, apt. 1304
Chácara da Cachoeira
79040 010 - Campo Grande - MS, Brasil.
Email: krugergm@hotmail.com

Received on: 07/07/2017
Approved on: 11/03/2018

This study was performed at the Dermatology Ambulatory of the Hospital Universitário Maria Aparecida Pedrossian, Universidade Federal do Mato Grosso do Sul (UFMS) - Campo Grande (MS), Brazil.

Financial support: None
Conflict of interests: None

CC BY

INTRODUCTION

Basal cell carcinoma (BCC), also known as basal cell epithelioma, is the most frequent epithelial neoplasm in Brazil, being more common in men. Its incidence increases in higher age groups, and it is estimated that in the last 30 years it has increased from 20% to 80%. The mean age at diagnosis is 68.[1]

Masson introduced the retroauricular island flap – also known as "saloon door" flap, revolving door flap, or *flip flop* flap – in 1972. Several authors later on modified the technique, and the indication for its use was extended for extensive auricular defects.

CASE REPORT

A 75-year-old female patient sought care describing the emergence of a lesion in the right ear's concha roughly one year before. Physical examination showed an erythematous, infiltrated plaque in the central portion adhered to the cartilage. Dermoscopic examination revealed arboriform vessels and hyperchromic leaflet-like structures (Figure 1). A previous biopsy indicated the presence of BCC, nodular subtype. During surgery planning the lesion was marked using dermoscopy, with a 5mm margin. The flap was also marked in the retroauricular region. Local infiltrative anesthesia was used. The exeresis of the lesion and underlying cartilage were performed, followed by the cre-

ation of the island flap in the retroauricular portion and the rotation of the skin to the anterior portion (Figure 2). The flap was positioned and sutured. Subsequently, the posterior defect was closed (Figure 3). The sutures were performed in a single plane, with nylon thread and single stitches, which were removed 15 days later. Anatomopathological examination results confirmed that it was a nodular BCC with free margins. Healing occurred without intercurrences and good aesthetic and functional outcomes were observed after three weeks (Figure 4).

DISCUSSION

To reconstruct partial defects of the ear while preserving decreasing its size and changing its natural contour and shape has always been a challenge. In this location, in addition to the cure, it is necessary to attempt to preserve facial aesthetics. Alternatives to the reconstruction of the defects are: second intention closure, skin grafts, and wedge excision – all of which entailing the reduction of the auricular height.

Some studies have shown that when dermoscopy is used for demarcating the margins, there is a high rate of complete excision of the BCC (95% - 98.5%).[6] Thus, it is critically important to demarcate the lesion's margins via dermoscopy when micrographic Mohs surgery is not available.

The posterior auricular flap is a versatile option for the partial reconstruction of the ear defect. Planning, choosing an appropriate and individualized technique depending on the type of tumor, the location of the lesion and conditions of the patient are key to achieving a good aesthetic outcome.

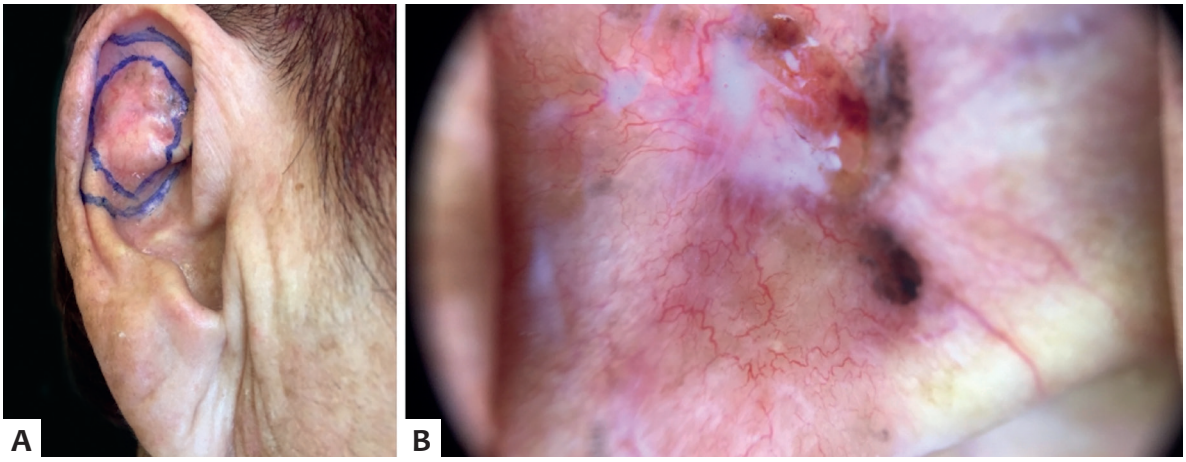

Figure 1: **A -** erythematous infiltrated plaque in the central portion of the auricular pavilion compromising part of the concha, anti-helix, and the whole of the triangular fossa; marking of 5mm margins; **B -** Dermoscopy evidencing arboriform vessels and hyperchromic leaflet-like structures

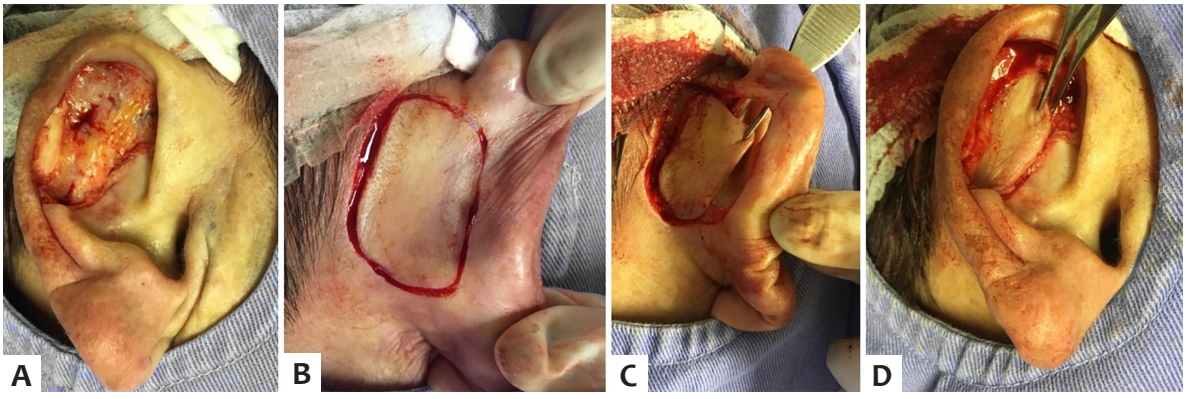

Figure 2: A - Exeresis of the lesion and underlying cartilage; **B -** Preparation of the island flap in the retroauricular portion; **C -** Island flap with the base attached to the mastoid, passing through the defect and into the anterior face of the ear*; **D -** Flap positioned on the anterior face of the auricular pavilion*

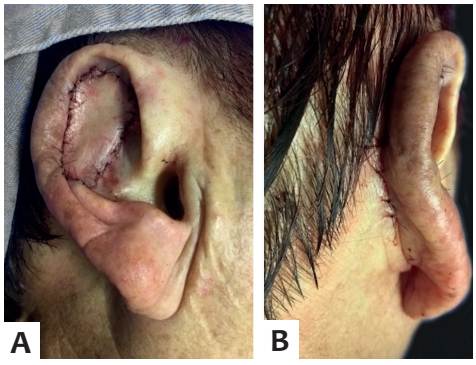

Figure 3: A - Flap sutured to the anterior skin, completely closing the anterior face of the auricular pavilion; **B -** Primary closure of the posterior defect by suturing the posterior skin of the ear to the skin of the mastoid

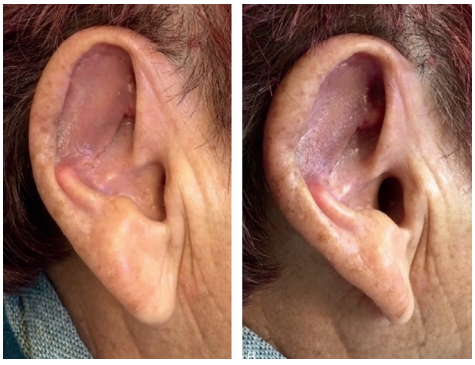

Figure 4: Final outcome after 15 days

REFERENCES

1. Bolognia JL, Jorizzo JL, Schaffer JV. Dermatology. 3rd ed. Philadelphia: Elsevier; 2012. 1774 p.
2. Masson Jk. A simple island ap for reconstruction of concha-helix defects. Br J Plast Surg. 1972; 25(4): 399-403.
3. Talmi YP, Horowitz Z, Bedrin L, Kronenberg J. Auricular reconstruction with a postauricular myocutaneous island flap: flip-flop flap. Plast Reconstr Surg. 1996;98(7):1191-9.
4. Redondo P, Lloret P, Sierra A, Gil P. Aggressive tumors of the concha: treatment with postauricular island pedicle flap. J Cutan Med Surg. 2003;7(4):339-43.
5. Jackson T, Milligan I, Agrawal K. The versatile revolving door ap in the reconstruction of ear defects. Eur J Plast Surg. 1994;17:131-33.
6. Comparin C, Freitas CAF, Hans-Filho G. Dermatoscopy as a tool in the detection of presurgical margins of basal cell carcinomas. Rev Bras Cir. Cabeça Pescoço. 2013;42(1):47-52

DECLARATION OF PARTICIPATION:

Guilherme Moraes Kruger | ORCID 0000-0003-1296-2103
Design and planning of the study, intellectual participation in the propaedeutic and/or therapeutic approach of the case, revision of the manuscript, literature review and approval of the final version of the manuscript.

Gabriela Kimie Aseka | ORCID 0000-0002-5573-2378
Critical review of the manuscript.

Carlos Alberto Ferreira de Freitas | ORCID 0000-0003-2501-0128
Intellectual participation in the propaedeutic and / or therapeutic approach of the case, revision of the manuscript, literature review and approval of the final version of the manuscript.

Günter Hans Filho | ORCID 0000-0001-9324-3703
Critical review and approval of the final version of the manuscript.