

Case Report

Interpolation flap for closing a surgical defect in the ear lobe

Retalho de interpolação para fechamento de defeito cirúrgico em lóbulo de orelha

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ABSTRACT

An interpolation flap is an effective method for reconstructing large and deep defects when the surrounding tissue does not allow direct closure. These flaps use tissue from non-adjacent areas with a vascular pedicle that supplies the flap until neovascularization between the flap and the recipient area occurs. This study describes the use of an interpolation flap to close a defect in the anterior ear lobe that resulted from the excision of two basal cell carcinomas.

Keywords: surgical flaps; ear; carcinoma, basal cell.

RESUMO

O retalho de interpolação é um bom método para reconstruir um defeito amplo e profundo quando o tecido adjacente não permite um fechamento direto. Esses retalhos usam tecidos de área não adjacente com pedículo vascular para suprir o retalho até que uma neovascularização tenha sido estabelecida entre o retalho e o leito receptor. Esse estudo descreve a aplicação de um retalho de interpolação para fechar um defeito secundário à excisão de dois carcinomas basocelulares na face anterior do lóbulo de orelha.

Palavras-chave: retalhos cirúrgicos; orelha; carcinoma basocelular.

INTRODUCTION

Basal cell carcinomas (BCC) are the most common type of cutaneous tumors, accounting for approximately 70% of all skin cancers. Although surgical excision is normally recommended, there may be situations in which direct closure is not feasible, requiring the use of a flap or a graft.¹

An interpolation flap consists of a segment of skin and subcutaneous tissue that rotates on a pivot, extending in the shape of an arc up until a defect located nearby, however not immediately adjacent. That flap's pedicle passes over the normal skin, under which the surgeon carries out the repair.²⁻⁵

This case report describes the use of an interpolation flap to correct a wound secondary to the exeresis of two BCCs located in the earlobe.

Received on: 26 January 2012
Approved on: 19 February 2012

This study was carried out at the Dermatology Department of the Hospital Universitário do Norte do Paraná da Universidade Estadual de Londrina (UEL) – Londrina (PR), Brazil.

Financial support: None
Conflict of interest: None

CASE REPORT

J.C., a 70-year-old male patient, presented with two lesions in the anterior lobe of the left ear, compatible with superficial BCC (Figure 1). After marking the lesions with 0.5 cm margins, the tumor was excised. Primary closure of the raw area was not possible (Figure 2). An interpolation flap was chosen to close the raw area (Figure 3). The flap was positioned and sutured in the site with mononylon 6.0, leaving out a small vascular pedicle; this area was closed with mononylon 5.0 sutures (Figure 4). The stitches were removed one week later (Figure 5). The resection of the pedicle was carried out three weeks later (Figure 6). The patient recovered without complications and with a good aesthetic result.



Figure 1: Marking of lesions with 0.5 cm margins



Figure 2: Appearance of the surgical defect after resection with 0.5 cm margins



Figures 3A and 3B: Interpolation flap

DISCUSSION

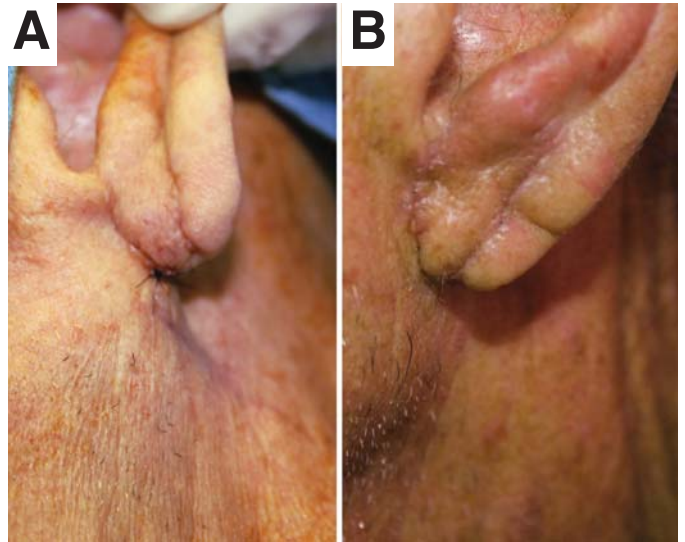
Cutaneous flaps are a necessary technique for closing excisions of skin tumors.¹⁻⁵ In dermatologic surgery, most flaps use skin adjacent to the wound, which leads to better aesthetic results.²

Extensive wounds resulting from surgical excisions of cutaneous neoplasias in the earlobe pose a considerable surgical challenge. Therefore, it is essential to choose the appropriate technique in order to obtain the best aesthetic results.⁵

This case used the interpolation technique, which is an excellent method for closing large and deep defects if the sur-



Figure 4:
Closure of the
donor area
and flap in
the recipient
site, with its
vascular
pedicle



Figures 6A and 6B: After resection of the vascular pedicle



Figures 5A and 5B: Flap with vascular pedicle seven days after the procedure

rounding tissue does not allow direct closure. Tissues from non-adjacent areas are used in those cases, leaving out a vascular pedicle to supply the flap until neovascularization is established between the flap and the recipient site. The main disadvantage of this type of flap is that it requires two surgeries to complete. The resection of the pedicle is carried out after the complete neovascularization of the recipient area, which usually occurs after three weeks.²⁻⁵

This case report describes the successful use of the interpolation flap technique, which led to satisfactory, aesthetically acceptable results without complications. ●

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