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*

**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.

**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.²⁻⁴

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.
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.

DISCUSSION

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

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

REFERENCES