Case report

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Earlobe transposition: a simple flap in the reconstruction of full-thickness surgical defect of anti-tragus

Transposição de lóbulo de orelha: um retalho simples para reconstrução de defeito cirúrgico de espessura total do antítrago

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ABSTRACT

Skin cancer frequently occurs on the pinna. The three-dimensional conformation and the limited availability of redundant regional skin make the reconstruction of this anatomical area challenging. We report the reconstruction of anti-tragus using an earlobe transposition flap.

Keywords: Carcinoma, Squamous cell; Ear auricle; Mohs surgery; Skin neoplasms; Surgical flaps

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RESUMO

O câncer de pele ocorre com frequência na região do pavilhão auricular. A conformação tridimensional e a disponibilidade limitada de pele redundante regional tornam a reconstrução desta área anatômica desafiadora. Relata-se a reconstrução de antítrago utilizando-se um retalho de transposição de lóbulo de orelha.

Palavras-chave: *Carcinoma de células escamosas; Cirurgia de Mohs; Neoplasias cutâneas; Pavilhão auricular; Retalhos cirúrgicos*

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INTRODUCTION

The pinna is a place with a high incidence of skin cancer. The literature estimates that about 16% of skin tumors occur at this location.[1] The pinna is formed by several subunits endowed with concavities and convexities that make its shape peculiar, requiring a detailed surgical reconstruction after the excision of tumors. We describe the reconstruction of a full-thickness defect of the antitragus using an earlobe transposition flap after a Mohs micrographic surgery (MMS).

CASE REPORT

A 72-year-old patient presented two well-differentiated squamous cell carcinomas (SCCs), located (Figure 1) in the region of the tragus and the antitragus. Both tumors were treated using the MMS technique, with free margins obtained in the first stage. After the closure by primary intent of the tragus re-

Figure 1: Nodules infiltrated in the region of tragus and antitragus, with previous histological diagnosis of well-differentiated infiltrative SCC

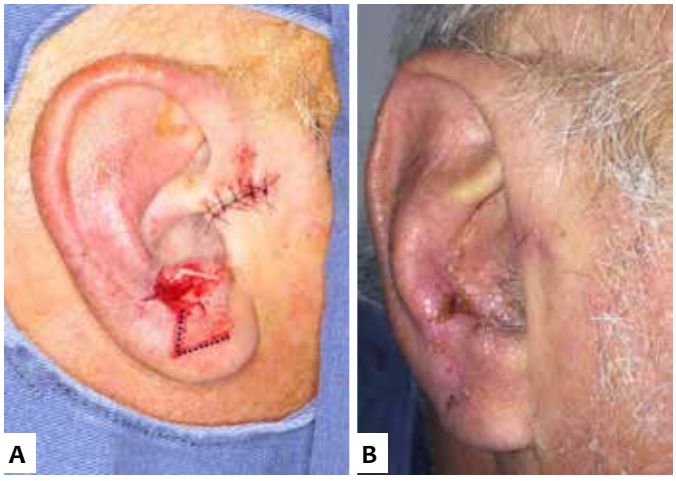

Figure 2: A. Transpositional flap with closure by primary intent of the secondary defect. **B.** Ten days postoperative

Figure 3: Surgical defect of 1.5 cm x 1.4 cm, affecting the total thickness of the antitragus. Design of the earlobe transposition flap

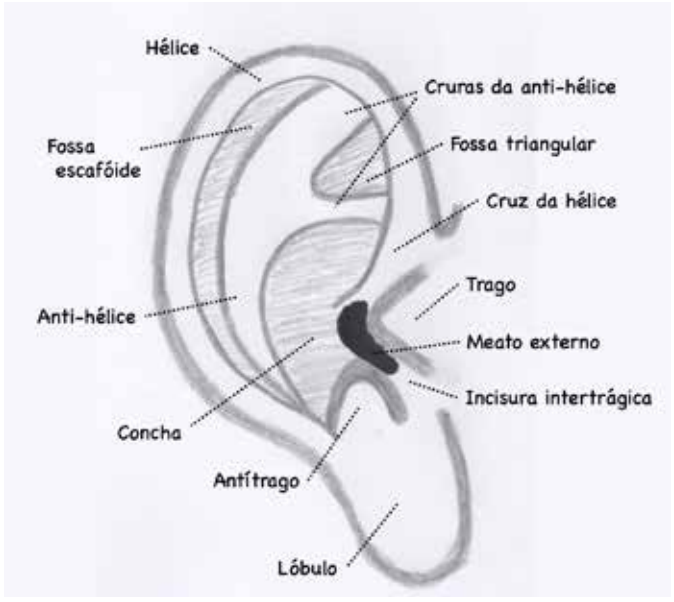

Figure 4: Anatomical subunits of the auricle

gion, a surgical defect of 1.5 cm x 1.4 cm, compromising the sub-unit of antitragus, was still present. An earlobe transposition flap was planned (Figure 2), with its redundancy in the pivotal region, purposely left to recreate the contour and projection present in the antitragus' natural anatomy (Figure 3).

DISCUSSION

About 12 subunits or anatomical points of interest form the pinna (Figure 4).[2] Regarding the antitragus, the literature on its reconstruction is scarce. A literature review found three articles describing complex techniques for its reconstruction, with good cosmetic results. A case report written by Chadha, Grob, and Soldin[3] described an "open book" flap in the reconstruction of a defect involving antitragus, conchal bowl, and antihelix in a case of SCC. The lesion was removed, and the surgical defect repaired using a tunneled transposition flap of the preauricular region in a single time. Finally, Gonzalez-Sixto et al.[5] described a series of four reconstructed ear defects with a chondrocutaneous advancement flap by V-Y advancement. One of them used the flap to reconstruct the antitragus.

Primary and secondary wound closures are also simple closure options for this subunit, although earlobe elevation may occur as a consequence. The limited availability of redundant skin and the frequent extrapolation of anatomical subunits by tumors in this region make the pinna reconstruction challenging.[6,7] The earlobe is one of the few ear sites with sagging skin, thus being useful for use as a donor site in flaps. ●

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