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## Reconstruction of an Anterior Auricular Defect Through a Tunnelized Preauricular Transposition Flap

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Dear Editor,

Reconstruction of the anterior surface of the auricle after oncologic surgery is often a challenge due to the scarce amount of skin available, its restricted vascularization, and the fact that it is an area of difficult manipulation requiring careful planning of the surgical technique.[\[1,2,3,4,5\]](#) There are several options to correct auricular defects including local flaps, skin grafts, and even healing by secondary intention. [\[1,2,3,4,5\]](#) We present a reconstruction of an anterior auricular defect through a tunnelized preauricular transposition flap that allows to preserve the original anatomy of the region.

A 62-year-old Caucasian man presented to our dermatology unit with a basal cell carcinoma in his right scapha [\[Figure 1\]](#). We first designed a flap in the preauricular region for reconstruction [\[Figure 2\]](#) and then administered local anesthesia with lidocaine 2%. We excised the lesion sparing the cartilage. The primary defect measured about 1.3cm in diameter [\[Figure 3\]](#). Then, the flap was dissected and passed through an incision on the posterior aspect of the antihelix, under the helix's root, and adapted to the defect [\[Figures 4 and 5\]](#). The segment of the flap that is passing under the tunnel was deepithelialized. Finally, we closed the flap and donor site [\[Figure 6\]](#). The histological examination of the lesion confirmed basal cell carcinoma totally excised. There was good healing without complications in 3 months of follow up [\[Figure 7\]](#).

Surgery of the ear is complex, particularly when the disorder affects the anterior surface, which is more visible. By definition, transposition flaps must be elevated over an area of normal skin to reach their eventual destination in the primary defect. This reconstruction through a preauricular tunnelized transposition flap allows to preserve the antihelix original anatomy and its natural curvature.[\[2,4,5\]](#) It also provides skin with a similar color and texture to the defect, as an alternative to the graft and it can be a better option than second-intention closure that is a long process associated with increased risk of infection.[\[1,4\]](#) The flap is well vascularized and has a good consistency. It is a surgical technique that provides a satisfactory cosmetic result in a single-stage procedure, preferable by the patient.

### Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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### Conflict of interest

There are no conflicts of interest.

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### Figures and Tables

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**Figure 1**



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Basal cell carcinoma in scapha



**Figure 2**

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Flap design in the preauricular region

**Figure 3**

[Open in a separate window](#)

Primary defect after tumor excision



**Figure 4**[Open in a separate window](#)

Dissection of the flap

**Figure 5**

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Passage of the flap under the helix's root, adapting to the defect



**Figure 6**[Open in a separate window](#)

Closure of the flap and donor site



**Figure 7**

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Ear aspect after 3 months of the surgery

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