An Alternative Technique to Repair Large Loss of Substance of the Scalp

Letter to the Editor:

Skin grafts and flaps are currently widespread surgical techniques that allow surgeons to quickly repair large losses of tissue of the scalp. 1,2,3 Graft take could be decreased by risk factors such as smoking, diabetes, vasculopathy, metabolic syndrome, infections, edema, or hematoma. When necrosis occurs, the epithelial proliferation begins from the wound edges. In the case of scalp defects, wound healing by secondary intention needs much more time and is also influenced by the wound diameter.

A simple measure used by the authors in situations like this is to design a transposition flap from the edge of the loss of tissue, rotate it to the center of the wound, with the intention to divide the wound into two smaller lesions. This allows one to obtain two smaller wounds with a diameter less than that of the original wound. In this way, the epithelium proliferation processing from the wound edges will be faster, because of the decreased distance between the edges and the center of the wounds (Figure 1).

We believe this simple measure could be a helpful reconstructive procedure of the scalp in selected patients who are not eligible for other common techniques^{1,2} of reconstructive surgery and when clinical evidence predicts a greater risk of failure from a flap or graft.



Figure 1. Postoperative image at 40 days. a, flap transposition; b-b', skin grafts.

References

- Wu Y, Chai J, Liu C. Repair of immedicable ulcer in skull cap with expanded bipedical axial flap in senile patients. Zhongguo Xiu Fu Chong Jian Wai Ke Za Zhi 2007;21:917–20.
- García del Campo JA, García de Marcos JA, del Castillo Pardo de Vera JL, García de Marcos MJ. Local flap reconstruction of large scalp defects. Med Oral Patol Oral Cir Bucal 2008;13:E666–70.
- Blackwell KE, Rawnsley JD. Aesthetic considerations in scalp reconstruction. Facial Plast Surg 2008;24:11–21.

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