

## Closure of Large Lower Lip Defects: Combining a Karapandzic Flap and a Contralateral Sliding Flap<sup>☆</sup>



### Cierre de grandes defectos en el labio inferior. Combinación: colgajo de Karapandzic y colgajo de deslizamiento contralateral

To the Editor:

Dermatologic surgery of the lip is challenging, especially when defects are large, difficult to close, or might leave scars that can interfere with function or aesthetics.<sup>1</sup> When direct closure is impossible, the surgeon must choose the most appropriate technique for the location in order to avoid complications.<sup>1</sup> Therefore, in the case we report we chose to close the wound with a Karapandzic flap combined with a contralateral sliding flap in order to ensure the functional integrity of the lip in accordance with the maxims of oncologic surgery on the face.

A 54-year-old man with no personal or family medical history of interest, a smoker since the age of 20, presented with a tumor on the right lower lip of 6 months' duration. He



Figure 1 Tumor and planned incision mark.

reported no bleeding, although he had felt increased pain in the last few weeks. Physical examination revealed a tumor 2 cm in diameter at the largest point. The tumor was papilliform, hyperkeratotic, and had spread to the buccal mucosa at the labial commissure (Fig. 1). The incision to remove the tumor included the full thickness of the skin and adequate margins (1 cm). The wound was then closed with a Karapandzic flap combined with a contralateral sliding flap. The plane of dissection extended to the muscle, and efforts were made to preserve the shape and function of the mouth. The procedure was performed under general anesthesia and a local anesthetic (2% mepivacaine) (Fig. 2). Fig. 3 shows the early postoperative outcome.

The principal aim of oncologic surgery is to remove the lesion with tumor-free margins. The choice of reconstructive technique depends on the anatomical region involved, the depth and size of the tumor, the characteristics of adjacent tissue, and the surgeon's skill.<sup>2</sup> If direct closure cannot be used because the defect is large and excessive tension would compromise function and aesthetics, the surgeon's second choice would be to use flaps.<sup>2-5</sup>

There is no ideal method for lip reconstruction that avoids alterations of form or function such as microstomia or an incompetent oral commissure, which is associated with chronic drooling if there is suspension. If the lesion occupies more than a third of the lip, flaps are usually used to reconstruct these defects.<sup>5</sup> The combination of a Karapandzic flap and a contralateral sliding flap provided several important advantages in this case: the technique could be completed in a single procedure; once the surgeon learns the technique it is accomplished quickly; and an important network of vessels and nerves are preserved, ensuring long-term safety with good movement and sensitivity. Moreover, this combination reduces the upper extension of the Karapandzic flap, thus avoiding damage to vessels and nerves (eg, the terminal mandibular and buccal branches of the facial nerve) that are sometimes associated with this flap.<sup>6</sup> The technique consists of excising the tumor and then cutting myocutaneous flaps, dissecting the orbicularis oris muscle to locate the arterial and venous branches of the facial vessels while attempting to avoid the nerve branches. The skin and muscle tissue can then slide forward, leaving the underlying muscle intact. These flaps are highly mobile and can be rotated toward the defect without constricting the vessels. Care should be taken to control bleeding before suturing the wound. The mucosal tissue and the muscle plane are first closed with absorbable sutures. Nonabsorbable sutures are then used to close the skin.<sup>7</sup> Other techniques, such as the V-block or the Estlander flap can cause functional complications and large defects. They are also more likely to lead to microstomia. The Gillies flap technique, which is even more invasive and leads to more complications, can be avoided when the surgical wound is to one side of the lip.

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**Figure 2** Surgical steps from start to closure.



**Figure 3** A, Early postoperative state. B, The oral commissure 1 month after closure.

## Conflicts of Interest

The authors declare that they have no conflicts of interest.

## References

- Perez Bustillo A, Gonzales Sixto B, Rodriguez Prieto MA. Fundamentos quirúrgicos para la obtención de una cicatriz funcional y estética. *Actas Dermosifiliogr.* 2013;104:17–28.
- Jiménez Puya R, Vázquez Bayo C, Gómez García F, Moreno Giménez JC. Complicaciones en dermatología quirúrgica. *Actas Dermosifiliogr.* 2009;100:661–8.
- Batra RS. Surgical techniques for scar revision. *Skin Therapy Lett.* 2005;10:4–7.
- Oganesyan G, Jarell AD, Srivastava M, Jiang SI. Efficacy and complication rates of full-thickness skin graft repair of lower extremity wounds after Mohs micrographic surgery. *Dermatol Surg.* 2013;39:1334–9.
- Nzakamwita M, Linker M, Gitani J, Piert R. Repair of tissue loss of the lips. *Acta Stomatol Belg.* 1995;92:159.
- Karapandzic M. Reconstruction of lip defects by arterial flaps. *Br J Plast Surg.* 1974;27:93.
- Elejabeitia J, Samper A. Puntos críticos en cirugía oncológica cutánea facial. *Piel.* 2001;16:307–14.

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