

Reply to: Comment on “Meshed keystone flap: A last-step modification to reduce tension and cover a larger surface”



To the editor: We read the letter written by Jaloux et al very carefully.

The keystone flap is indeed a random perforator island flap, and its survival depends on deep vascularization: muscular and fascial perforators.^{1,2} However, our modification does not touch this anatomic component at all. On the contrary, the perforations on the skin surface are the result of cutting the epidermis and dermis, clearly visualizing the subcutaneous component in all the cuts, far away from fascia and muscular vascularization³ (Fig 1).

The main advantage of this recommendation is avoiding damage to and necrosis of the epidermis and superficial dermis, as well as allowing enlargement of the covered surface area.

After sectioning the skin, the pale appearance of the tensioned area will disappear because of re-establishment of blood supply, giving it a normal reddish aspect.

We strongly suggest that this pearl be used not only for this flap but also for all types of closures where tissue survival is compromised because of the



Fig 1. Subcutaneous fat below the surface cuts.

tension caused to the superficial layers of the skin (perhaps in just 1 part of a flap), for which a relaxation of the epidermis and dermis is obtained through sections perpendicular to maximum-tension areas without compromising the deeper vascular supply (Fig 2).

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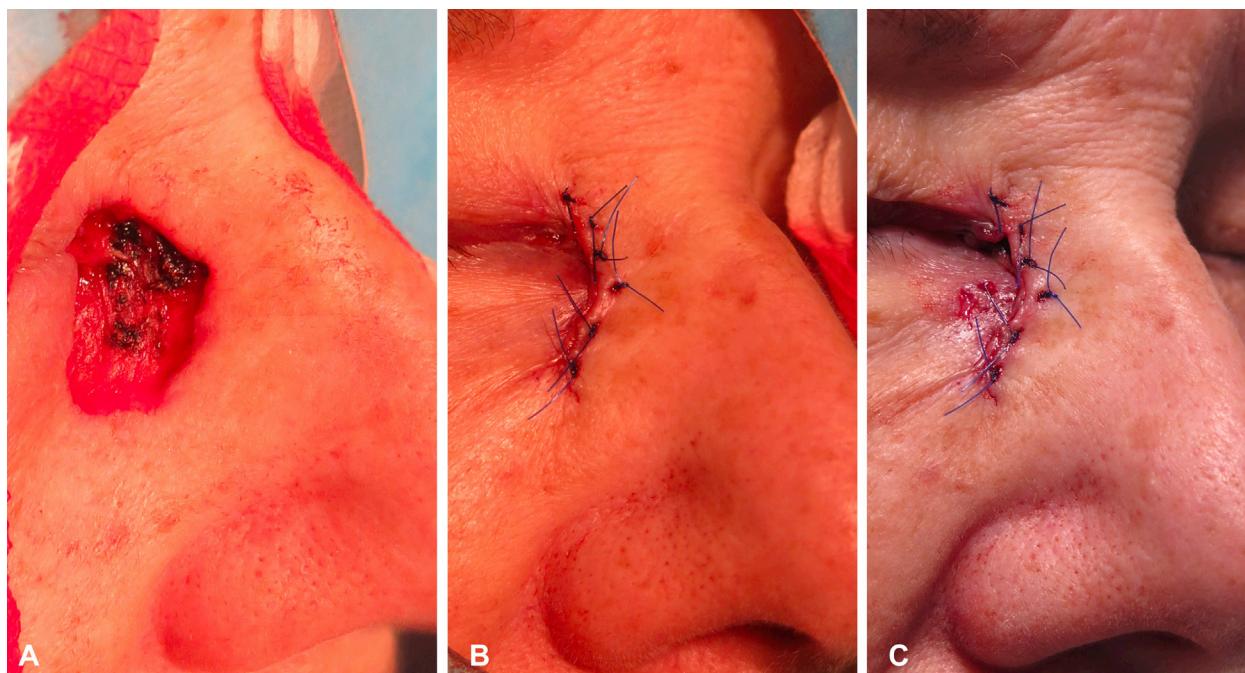


Fig 2. **A**, Mohs surgery final defect. **B**, Tensioned area. **C**, Sections perpendicular to the maximum tensioned area regaining their normal reddish aspect, and the covered area is expanding.

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REFERENCES

1. Behan FC. The keystone design perforator island flap in reconstructive surgery. *ANZ J Surg*. 2003;73(3):112-120.
2. Mohan AT, Sur YJ, Zhu L, et al. The concepts of propeller, perforator, keystone, and other local flaps and their role in the evolution of reconstruction. *Plast Reconstr Surg*. 2016;138(4):710e-729e.
3. Miguel BAF, Morgado-Carrasco D, Toll A, Pérez-Anker J. Meshed keystone flap: a last-step modification to reduce tension and cover a larger surface. *J Am Acad Dermatol*. 2020;83(6):e397-e398.

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