

necessary. Lateral retinacular support served as prophylaxis against lid malposition during the healing/edema phase and is not meant to be permanent. All eyelids undergo slight to minimal lower lid fat removal, sometimes purely for contour and “smoothing,” not just for debulking purposes. We have not witnessed any posterior and/or middle lamellae contracture with the five-step method. All patients in our study required at least slight skin pinch excision, and no patients demonstrated exophthalmos, which is a contraindication to this technique. The conservative degree of skin removal and avoidance of injury to the septum/orbicularis muscle anteriorly all help to eliminate tension and resultant anterior lamella shortening.

Concern regarding exacerbation of tear trough as a result of adjacent augmentation of the deep malar fat pad is valid and is a common source of trepidation. Selective orbicularis retaining ligament release allows migration of native lower lid fat to coalesce with the superficial and deep malar fat compartments. Molding is performed intraoperatively to further blend this region. Reducing skin laxity with pinch removal also helps reduce tear trough appearance. Deep malar fat augmentation also acts to elevate the superficial fat compartments cephalically to meet the now released lower lid fat.

We thank Dr. Gradinger for his clear and directed comments on the numerous challenges inherent in lower eyelid rejuvenation. We hope that our five-step technique helps to shed more light on the key principles and techniques in safe and effective lower eyelid-cheek rejuvenation.<sup>2-5</sup>

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## A New Carbon Dioxide Laser Combined with Cyanoacrylate Glue to Treat Earlobe Keloids

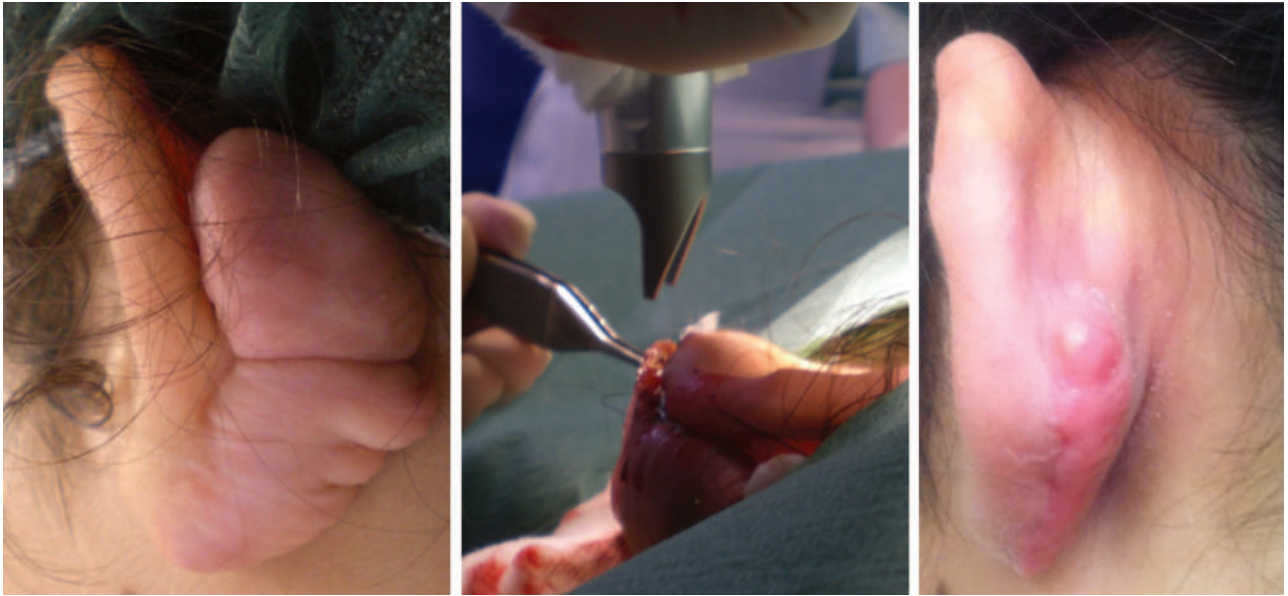
Sir:

**W**e read with great interest the article entitled “Outcomes of Surgical Excision with Pressure Therapy Using Magnets and Identification of Risk Factors for Recurrent Keloids” by Park et al.,<sup>1</sup> and we congratulate the authors for their wide patient population and statistical analysis. In recent decades, multiple studies on keloid formation have been conducted, leading to a plethora of therapeutic strategies. However, no clear guidelines have been given, probably because of poor understanding of the complex underlying mechanisms.<sup>2</sup>

Recent studies suggest that only an integrated approach can be a valid solution.<sup>3,4</sup> We therefore would like to add our experience of a small series of patients suffering for earlobe keloids. Seven keloids were excised completely under local anesthesia by means of a new carbon dioxide laser (Smartxide2; Deka M.E.L.A., Calenzano, Italy). This laser uses a radiofrequency source to generate perfectly controlled energy pulses. This technology develops a different pulse shape (D pulse) that acts more incisively on the reticular dermis, inducing greater shrinkage and more circumscribed



**Fig. 1.** Keloid of the ear lobule preoperatively (left) and 1 year postoperatively (right).



**Fig. 2.** Keloid on the left posterior auricular area preoperatively (left), intraoperatively (center), and 10 months postoperatively (right).

coagulation. Thus, a sort of “cold” ablation is achieved on the redundant scarring tissue that seems to inhibit the immediate inflammatory response. Moreover, starting 5 days after surgical excision, patients applied, on the treated area, *N*-butyl cyanoacrylate glue (Wipescar; Fasel S.r.l., Bologna, Italy), renewing it every 5 days for a period of 3 months.

The glue polymerizes as soon as it is dabbed on the superficial moisture of the scar, producing a rigid mechanical membrane. This cap aims to decrease skin tension and protects the scar from microbial infection, ensuring a favorable microenvironment for its maturation.

The patient in Figure 1 is a 19-year-old woman with Fitzpatrick skin type II, presenting with an itchy keloid on her left earlobe measuring  $2 \times 1.6$  cm, which had been pierced 5 years earlier.

The patient in Figure 2 is a 15-year-old girl with Fitzpatrick skin type III, who showed a  $9 \times 4.7$ -cm keloid on the posterior surface of the auricle caused by a piercing. This girl had already experienced keloid excision followed by pressure therapy three times over the past years, with the last operation having been performed 3.5 years ago. Photographs showing surgical excision with the laser and 10-month follow-up are presented.

Despite the limited number of cases, we believe that this approach can be an adjunctive tool for keloid management, without significant risk of adverse sequelae. The results obtained are good, and all patients are satisfied with the treatment. However, larger studies and longer follow-up are necessary to confirm the long-term efficacy of this novel treatment modality.

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## DISCLOSURE

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