



Letter to the Editor: Laser Enhancements After Surface Ablation

Laura de Benito-Llopis · Miguel A. Teus

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Key Summary Points

Surface ablation to treat residual refractive errors after previous laser surface treatments has been proved to be safe and effective.

This article is based on previously conducted studies and does not contain any new studies with human participants or animals performed by any of the authors.

We read with interest the article by Moshirfar et al. [1] about photorefractive keratectomy (PRK) enhancements following primary PRK. They show good results with the technique, which supports the well-established practice worldwide of retreating residual refractive errors

following PRK with a repeat surface ablation procedure.

We are surprised, though, to see how restricted their literature search was. They only report three studies on the matter since 2002, two of them with fewer than four eyes, and they base the need for their study in the lack of recent data on the subject.

PRK is a type of corneal laser surface ablation technique which is very similar to laser-assisted subepithelial keratectomy (LASEK), with the main difference being the repositioning of the epithelial flap over the ablated stroma after LASEK [2]. With the exception of the transepithelial PRK techniques, where the laser ablates through the epithelium before proceeding with the stromal ablation, the de-epithelialization in PRK is done with the application of 18–20% ethanol over the epithelium, like in LASEK. Results with PRK and LASEK, both using alcohol debridement, have been shown to be similar [3, 4]. Therefore, when searching for enhancements for PRK, we consider the authors should have included a search for “surface ablation,” “LASEK,” and “laser subepithelial keratectomy” papers. Had they done so, they would have found a paper published in 2010 by us [5], focused specifically on the results of surface ablation enhancements following previous LASEK, with a sample of 82 eyes. In our study, we focused our discussion on the lack of toxicity with the use of mitomycin C (MMC) in these

L. de Benito-Llopis (✉)
Moorfields Eye Hospital NHS Foundation Trust,
London, UK
e-mail: lauradeb@hotmail.com

M. A. Teus
Príncipe de Asturias University Hospital, Alcalá de
Henares, Madrid, Spain

retreatments. Moshirfar et al. [1] also report using MMC in their series of eyes when the ablation depth was deeper than 65 microns. Similar to those reported by Moshirfar et al., our safety and efficacy indices after enhancement (1.01 and 0.96, respectively) supported, already in 2010, the use of a surface ablation technique for enhancements after previous surface ablation procedures.

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