Double lenticule as a complication of SMILE

Doble lentículo como complicación de SMILE

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Dear editor,

We read with interest the excellent clinical case of Raya Hernández et al.¹ regarding a perioperative complication during refractive lenticule extraction (ReLEx) in its small incision lenticule extraction (SMILE, by its acronym in English) mode, which was published in September 2016 in the "In press" section of the online version of the Revista Mexicana de Oftalmología, and we would like to comment on its discussion and conclusions, since they are described in the conclusions of the work by Ramirez-Miranda et al.² published in the Cornea journal in October 2015 (originally presented at the VII World Cornea Congress in San Diego, California, April 2015). In our study² we included an evaluation of 254 eyes with ReLEx, of which the SMILE group included 160 eyes with an average follow-up of 36 months. From these, 26.9% (n = 43) had complications as part of the learning curve of 3 experienced cornea surgeons. These complications included persistent epithelial defect (the most frequent), suction loss, opaque bubble layer, lenticule rupture and black spots. Within the analysis, 5 patients had suction loss (11.6%, the least frequent). Suction loss is closely related to the learning curve, since most of the complications are related to surgeon inexperience, but they have favorable outcomes because they are minor and have no impact on the long-term final visual acuity of the patient.

Figure 1. Suction loss before completing the sculpting of the lenticule. The procedure must be aborted and rescheduled until total resorption of the cavitation bubbles is clinically verified by biomicroscopy.

We manage suction loss based on its moment of occurrence. If it occurs before the sculpting of the lenticule (Fig. 1), the procedure must be aborted and rescheduled, until the total reabsorption of the cavitation bubbles is clinically verified by biomicroscopy. When the suction loss occurs after the sculpting of the lenticule,

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during the creation of the cap, the eye can be repositioned in the femtosecond laser suction cone and cap sculpting can be reinitiated. Then, it is dissected as usual obtaining optimal results and avoiding the need to correct residual errors.

Overall, we agree with Raya Hernández et al. that there is not a standardized optimal time to continue a treatment that has presented suction loss, as there is

no uniformity in the techniques used to treat residual refractive errors after SMILE surgery.

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