



## LETTER TO THE EDITOR

## Double lenticule as a complication of SMILE

## Doble lentículo como complicación de SMILE

Arturo Ramirez-Miranda\*, Jesús Cabral-Macias, Alejandro Navas and Enrique O. Graue-Hernandez

Department of Cornea and Refractive Surgery, Instituto de Oftalmología «Fundación Conde de Valenciana IAP», Mexico City, Mexico

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 study<sup>2</sup> 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.

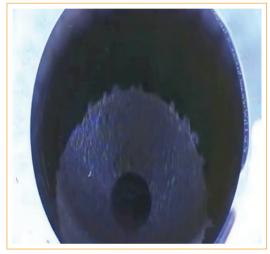


Figure 1. Suction loss before completing the sculpting of the lenticule. The procedure must be aborted and rescheduled until total resorption of the cavitation bubbles is clinically verified by biomicroscopy.

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,

\*Arturo Ramirez-Miranda

E-mail: arturorammir@gmail.com

Date of reception: 19-04-2016

Date of acceptance: 11-07-2016

DOI: 10.24875/RMOE.M19000052

Available online: 01-03-2019
Rev Mex Oftalmol (Eng). 2019;93(2):93-94

2604-1731/© 2019 Sociedad Mexicana de Oftalmología. Published by Permanyer México SA de CV. This is an Open Access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

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.

## References

- Raya Hernández DJ, Alegría Gómez ED, Baca Lozada O, Fernández Vizcaya O, Velasco Ramos R, Pacheco del Valle C, et al. Doble lentículo como complicación de cirugía refractiva tipo SMILE. Rev Mex Oftalmol. 2016, http://dx.doi.org/10.1016/j.mexoft.2016.07.006.
- Ramirez-Miranda A, Ramirez-Luquin T, Navas A, Graue-Hernandez EO. Refractive lenticule extraction complications. Cornea. 2015;34 Suppl 10:S65-7.