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LETTER TO THE EDITOR

Commentary on "Intraocular Pressure After LASEK"

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In reply,
First of all, we would like to thank Rosa et al. for their comments regarding our paper recently published in Graeffes.

Basically, the result of both theirs [1] and our paper [2] is similar, i.e., Schiotz indentation tonometry (ST) is less affected by previous surface ablation when evaluating the IOP than Goldmann tonometry (GAT).

We think that the subtle differences that may be encountered between both papers may be due by the fact the Rosa et al. do not use intraoperative application of MMC to prevent haze during the surgical procedure. It is well recognized that MMC is quite effective preventing haze [3] that may result in decreased BCVA and in a refractive overcorrection. In fact, the mean residual sphere of + 1.25 D that had the cohort analyzed by Rosa et al. suggests that this is the case. Corneas with haze may behave differently than normal corneas, and this can be, for sure, a source of bias.

Another major difference between the paper by Rosa et al. [1] and ours [2] is that we did include normal eyes that were evaluated by the same examiner and using the same three tonometers that were used in the operated eyes, while Rosa et al. only performed GAT tonometry in the preoperative exam. By doing so, they have missed the chance to compare GAT and ST readings in normal, unoperated corneas.

In addition, we included another tonometer in addition to Goldmann and Schiotz, the digital contour tonometer (DCT) or "Pascal" tonometer, that has been designed to minimize the effect of corneal rigidity and thickness on the IOP measurement. The fact that we found that ST is more accurate than both GAT and DCT strongly suggests that indentation tonometry is a method that needs to be considered for the IOP measurement in corneas that have undergone surface ablation, whether using MMC or not.

References

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