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Letter to Editor

Comparison of the effect of removing bandage contact lens on the days 3 and 5 following photorefractive keratectomy

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Dear editor,

We have read with interest the research by Daryabari et al.[1], the author team concluded that majority of post- photorefractive keratectomy (PRK) corneal epithelial defect was healed on day three. However, keeping the bandage contact lens (BCL) for five days postoperatively instead of the three days produces a slightly lower rate of total complication. The purpose of the study stands out to compare the outcomes of removing BCL on days three and five after PRK.

In regard to the methodology, each patient receives a BCL after PRK, the BCL was removed in all right eyes at three days postoperative and all left eyes at five days postoperative. We want to congratulate the authors for the great sample achieved, however the absence of randomization, like tossing a coin, could bias the group assignment. Therefore, in this work, ideally complex randomizations such as randomized complete blocks design or independent stratified randomization should be done.[2] Furthermore, a control group could improve the design and avoid using the contralateral eye for self-control.

Epithelial defect size should improve study scientific soundness. Previous authors[3, 4] described an epithelial size area calculation: $Area = \pi \left[\frac{a+b}{4}\right]^2$, where *a* and *b* denote shortest and longest epithelial size defect, respectively. We could find on the scientific literature randomized clinical trials that studied the BCL on pain perception, corneal re-epithelialization, or visual recovery after PRK. Nevertheless, we have systematic reviewed several research[4] which have analyzed this topic prior to this publication.[3, 5]

At last, we would like to highlight that a detailed methodological design in the pain score, visual recovery and re-epithelization assessment appear to be critical to achieve success on BCL treatment after PRK. The epithelial recovery time was short compared to that obtained in previous publications[4]. The material used as BCL (Senofilcon A) obtained the best recovery time in the systematic review carried out by this team of authors. In the same way, we would like to congratulate the authors for the excellent results obtained.

The authors declare no conflict of interest

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