

Laser Refractive Surgery (LRS) with Laser Asymmetric Keratectomy (Crescentic LRS) to Avoid LRS Adverse Effects



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Abbreviations: LRS: Laser Refractive Surgery; LAK: Laser Asymmetric Keratectomy

Opinion

After laser refractive surgery (LRS), adverse effects such as myopic regression, blurring, and in severe cases, halos at night are reported in a fraction of patients due to corneal biomechanical interaction of corneal thickness, corneal stiffness and IOP, resulting in optical aberrations [1-6]. Deviations in corneal thickness is a major factor in causing LRS adverse effects [5-10]. The sum of corneal central thickness deviations in four directions on Orbscan map (SUM) as a new evaluation index of corneal asymmetry was reported [7-15]. Recently, laser asymmetric keratectomy (LAK) has been reported, which is a biomechanical customized asymmetric corneal ablation method with full integration of Vision UP software and applied to avoid LRS adverse effects [7-10], a novel approach to enhancement in patients with myopic regression after LRS [11-13] and a new corneal remodeling technique in keratoconus suspect without postoperative corneal ectasia [14,15]. LRS combined with LAK (that is, so called as crescentic LASEK or LASIK) corrected refractive power and ablate on the thick peripheral cornea with integration of Vision UP software® to make cornea to be symmetric and ablate induced myopia due to LAK simultaneously. We recommend the conventional LRS to correct the refractive errors in myopic patients with relative symmetric cornea (SUM (80 µm preoperatively)), but LRS (LASIK or LASEK) combined LAK (crescentic LRS) can produce better surgical outcomes on myopic patients with asymmetric corneal thickness (SUM on Orbscan maps ≥80 µm) without LRS adverse effects.

References

1. Lim SA, Park Y, Cheong TJ, Na KS, Joo CK (2016) Factors affecting long-term myopic regression after laser in situ keratomileusis and laser-assisted subepithelial keratectomy for moderate myopia. *Korean J Ophthalmol* 30(2): 92-100.
2. Meshkhar M, Shah TJ, Skarschky DF, Linn SH, Durrie DS (2017) Meta-analysis of the FDA reports on patient-reported outcomes using the three latest platforms for LASIK. *J Refract Surg* 33(6): 362-368.
3. Roberts CJ (2000) The cornea is not a piece of plastic. *J Refract Surg* 16(4): 407-413.
4. Roberts CJ (2005) Biomechanical customization: The next generation of laser refractive surgery. *J Cataract Refract Surg* 31(1): 2-5.
5. Roberts CJ, Dupps WJ (2014) Biomechanics of corneal ectasia and biomechanical treatments. *J Cataract Refract Surg* 40(6): 991-998.
6. Ikeda T, Shimizu K, Igarashi A, Kasahara AS, Kamiya K (2017) Twelve-Year Follow-Up of Laser In Situ Keratomileusis for Moderate to High Myopia. *Biomed Res Int* p. 7.
7. Agudo JAR, Park J, Park I, Lee S, Park K (2019) Laser asymmetric corneal ablation to improve corneal shape. *Lasers Med Sci* 34: 1763-1779.
8. Min JS, Min BM (2020) Comparison between surgical outcomes of LASIK with and without laser asymmetric keratectomy to avoid conventional laser refractive surgery adverse effects. *Scientific Reports* 10: 10446.
9. Min JS, Min BM (2021) Comparison of outcomes of laser refractive surgery (LRS) alone and LRS with laser asymmetric keratectomy in patients with myopia: A retrospective study. *Medicine (Baltimore)* 100(14): e25366.

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