## Successful Ortho-K Treatment after Laser Vision Correction: A Case Series



Help You SEE Better

## Adisti Lukman, Andri Agus Syah

VIO Optical Clinic, Jakarta, Indonesia

## BACKGROUND

Laser Vision Correction (LVC), including Laser Assisted In Situ Keratomileusis

Medmont Studio						Page 1
	Contract	Flat K	8 16 mm @ 157 °		© Flat K	8 17 mm @ 8 º
50,00		Steep K	7,94 mm @ 67 °	50,00	Steep K	7,94 mm @ 98 °
49,00		ΔK	0,22 mm	49,00	$\Delta \mathbf{K}$	0,23 mm
48,00		Flat e	0,39 @ 157 °	48,00	Flat e	0,46 @ 8 °
47,00		Steep e	0,50 @ 67 °	47,00	Steep e	0,43 @ 98 °

(LASIK) and Refractive Lenticule Extraction – Small Incision Lenticule Extraction SMILE), are refractive (ReLex that eye surgery corrects myopia (nearsightedness), hyperopia (farsightedness) and astigmatism. An estimated 30 million people undergo Laser Vision Correction every year. Effectiveness studies show that 70% to 90% of patients achieve 20/20 vision or better after treatment. However, it is a fact that all laser refractive surgery patients in general will have a certain rate of re-myopia. Depending on the severity of the refractive error, the rate of this re-myopia can range from 1-2% to 12-15%. The use of Orthokeratology (Ortho-K), have become popular treatment option to reduce re-myopia in post LVC patient. This case series will report successful cases of Ortho-K usage after corneal laser surgery.

## CASE DESCRIPTION

Six patients was reported in this study. Five male and one female, ranging from 19 to 43 years old. Power of re-myopia varied between S-0,50 to S-1,75 and



C-0,50 to C-1,00 (all of which are with the rule astigmatism). K1 range from 40,0D to 41,56D; K2 range from 40,69D to 42,76D. HVID range from 11,0 — 11,4 while Flat E Value varied between 0,15 — 0,55. Sag Height at 8 mm are 9 — 45 and pupil width range from 2,7 — 4,0 mm. All patient were prescribed Optimum Extreme Ortho-K. Follow up after Ortho-K usage at 1, 3 and 6 month reported 6/6 vision without correction.



35,00

**Patient 1.** Corneal Topography showed baseline image before Ortho-K (above) and 6 months after Ortho-K treatment (below).

35,00

Table 1. Case Baseline Characteristics											
AGE, GENDER	REFRACTIVE ERRORS	K1	K2	HVID	SAG @8mm	PUPIL DIA					
27, M	S-1,25 C-0,75 x 180	40,3	41,48	11,2	17	4,5					
20, M	S-0,50 C-0,50 x 170	40,0	40,87	11,3	29	4,0					
10 F	$S_0 50 C_0 50 \times 160$	<u>/1 02</u>	<u>12 00</u>	11 /	21	27					

