Estimation of Femto-LASIK Operation Results With Femtosecond Laser Microkeratome After Radial Keratotomy

NO FINANCIAL INTEREST

O.A. Kostin, S.V. Rebrikov, A.I. Ovchinnikov, A.A. Stepanov

Ekaterinburg Eye Microsirgery Center

Ekaterinburg, Russia

Background

Earlier we have performed LASIK with Moria 3E mechanical microkeratome in the eyes with K values less than 39 D after radial keratotomy for correction of refractive errors

Aim

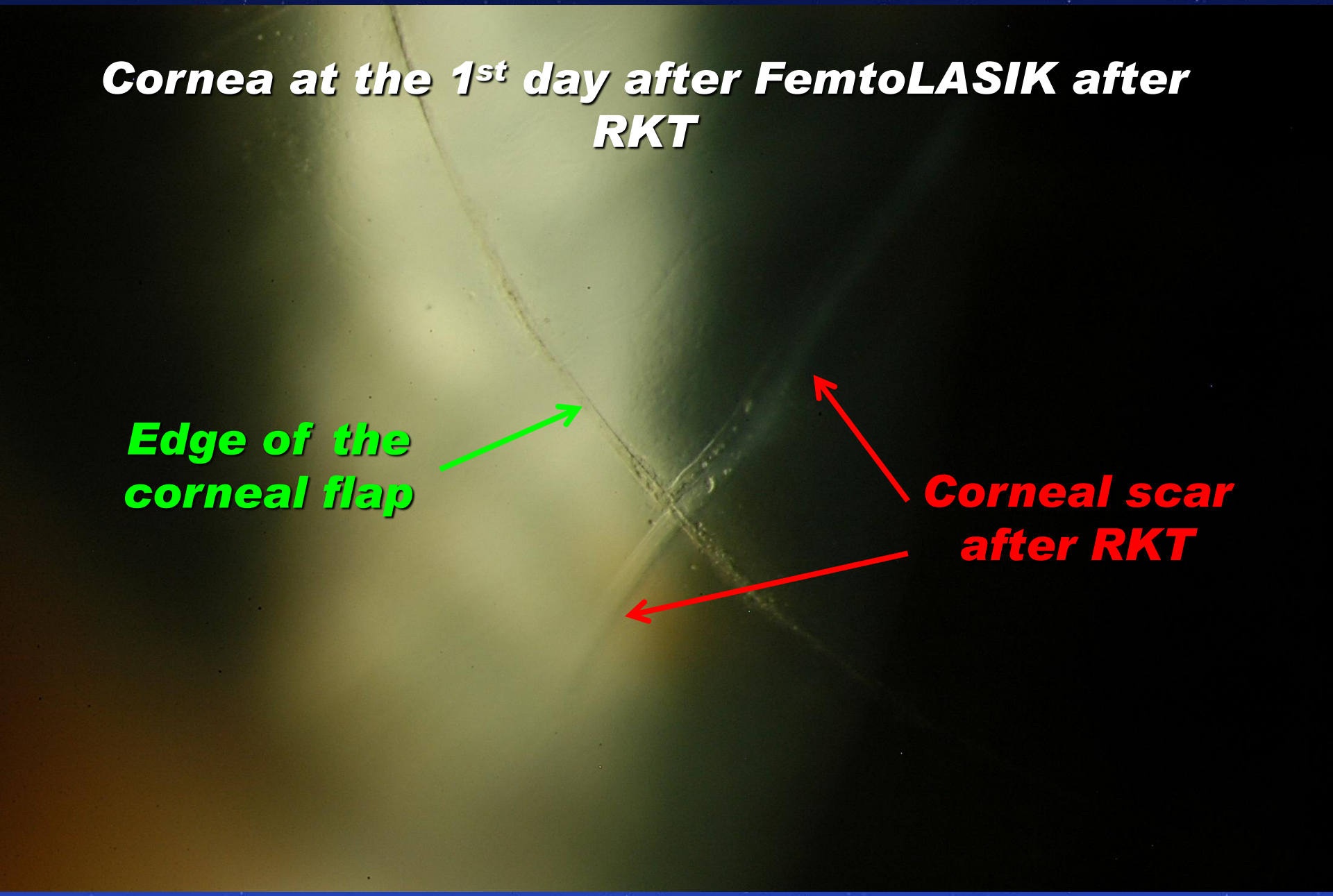
Estimation of FemtoLASIK operation results with MEL-80 excimer laser and VisuMax femtosecond laser (Carl Zeiss Meditec) in the eyes with “flat” cornea (K values less than 39 D)

Methods

4 patients (5 eyes) During FemtoLASIK a 100 µm corneal flap with a 12 o'clock hinge was formed with VisuMax femtosecond laser (Carl Zeiss Meditec)

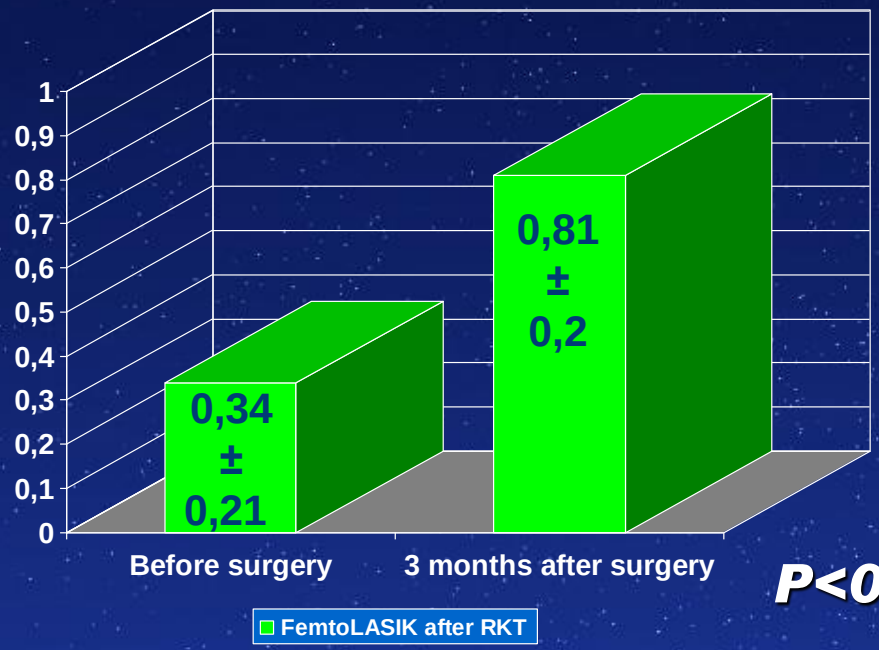
Corneal ablation was performed with MEL-80 excimer laser (Carl Zeiss Meditec).
Optical zone diameter was 6 mm.
Post-op follow-up was from 3 to 6 months

Cornea at the 1st day after FemtoLASIK after RKT



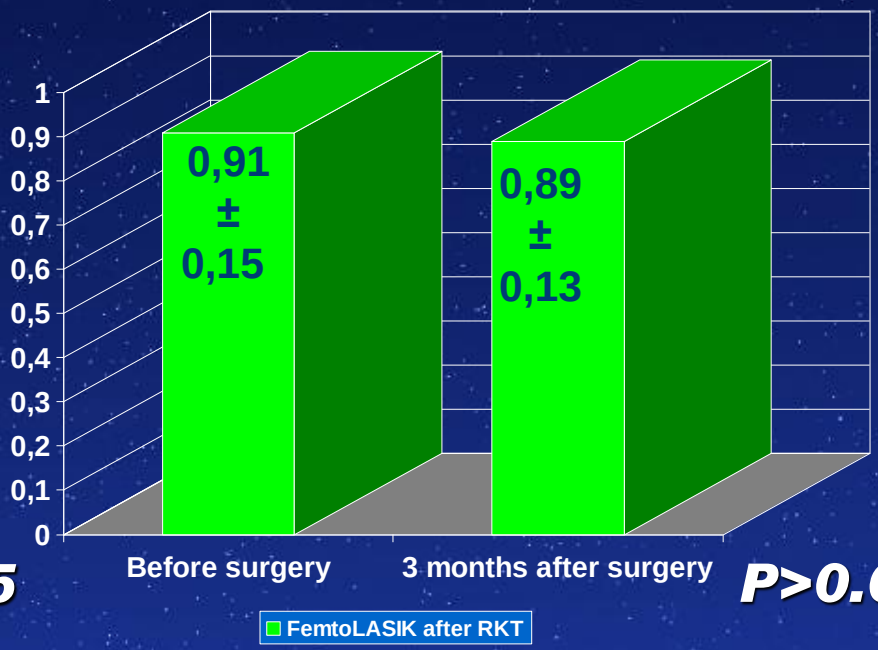
Results

UCVA



P<0.05

BCVA



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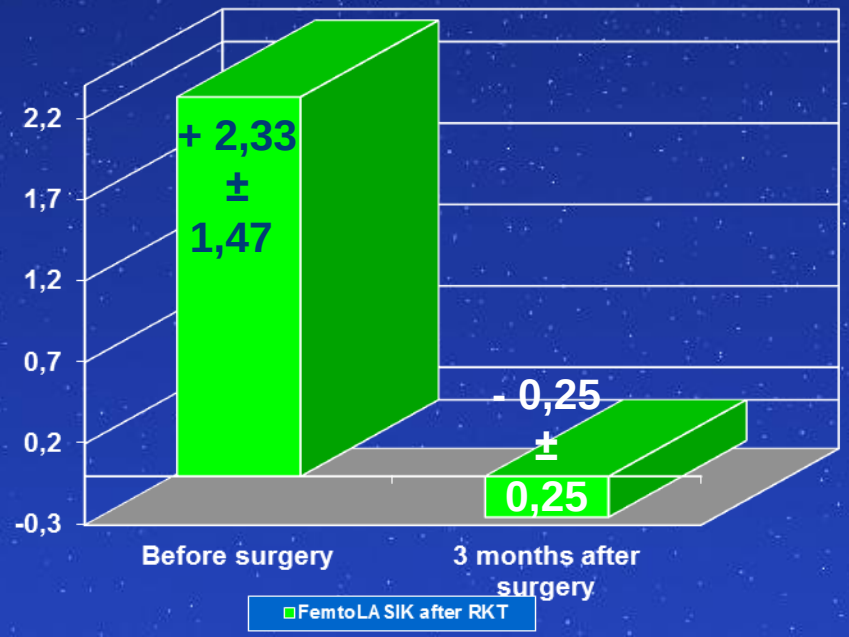
REFRACTION CHANGES



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Conclusions

1. FemtoLASIK in the eyes after radial keratotomy requires accuracy at the step of corneal flap separation from the stromal bed

2. FemtoLASIK is an effective and safe technology for correction of refractive errors in the eyes after radial keratotomy