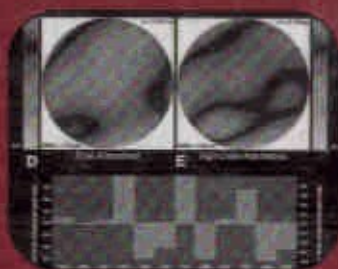


Refractive Surgery Series

Series Editors: Dimitri T. Azar and Douglas D. Koch

LASEK, PRK, AND EXCIMER LASER STROMAL SURFACE ABLATION



edited by

Dimitri T. Azar
Massimo Camellin
Richard W. Yee

Contents

<i>Preface</i>	<i>iii</i>
<i>Contributors</i>	<i>ix</i>
1. Overview of LASEK and Stromal Surface Ablation	1
<i>Suphi Taneri, MD and Dimitri T. Azar, MD</i>	
2. Laser Subepithelial Keratomileusis (LASEK): Theoretical Advantages Over LASIK	13
<i>Paolo Vinciguerra, MD and Daniel Epstein, MD, PhD</i>	
3. Indications and Contraindications of LASEK	19
<i>Jae Bum Lee, MD, Puwat Charukamnoetkanok, MD and Dimitri T. Azar, MD</i>	
4. LASEK Preoperative Considerations	25
<i>Robin F. Beran, MD, FACS</i>	
5. LASEK Preoperative Evaluation	33
<i>Chun Chen Chen, MD and Dimitri T. Azar, MD</i>	
6. LASEK Techniques	47
<i>Chun Chen Chen, MD, Joel Javier, MD, and Dimitri T. Azar, MD</i>	
7. Camellin LASEK Technique	73
<i>Massimo Camellin, MD</i>	
8. Butterfly LASEK	83
<i>Puwat Charukamnoetkanok, MD and Suphi Taneri, MD</i>	
9. Epithelial Flap Hydrodissection and Viscodissection in Advanced Laser Surface Ablation (ALSA)	89
<i>Richard C. Rashid, MD</i>	

10. Surface Ablation Without Alcohol: Gel-Assisted LASEK and Epi-LASIK using Epilift System	111
<i>Puwat Charukamnoetkanok, MD and Dimitri T. Azar, MD</i>	
11. Epi-LASIK: Surface Ablation Without Alcohol	115
<i>Ioannis G. Pallikaris, MD, PhD, Vikentia J. Katsanevaki, MD, Maria I. Kalyvianaki, MD, Irini I. Naoumidi, PhD, and Richard W. Yee, MD</i>	
12. Postoperative Management of LASEK	123
<i>Ahn Nguyen, MD, Amy Scally, OD, and Dimitri T. Azar, MD</i>	
13. LASEK Enhancements	133
<i>Lee Shahinian, Jr, MD</i>	
14. LASEK in High and Low Myopia	137
<i>Chris P. Lohmann, MD, PhD, David O'Brart, MD, Ann Patmore, BSC, John Marshall, PhD, Christoph Winkler von Mohrenfels, MD, Bernhard Gabler, MD, and Wolfgang Herrmann, MD</i>	
15. LASEK vs. PRK: Comparison of Visual Outcomes	149
<i>Minh Hanh Duong, MD and Damien Gatinel, MD</i>	
16. LASEK vs. LASIK: Comparison of Visual Outcomes	155
<i>Neal J. Peterson, MD, Alice Z. Chuang, PhD, Rajy M. Rouweyha, MD, and Richard W. Yee, MD</i>	
17. Topography-Based Aberration in LASEK vs. PRK and LASIK	169
<i>Michael K. Smolek, PhD, Stephen D. Klyce, PhD, Loan Nguyen, MD, Richard W. Yee, MD, John P. Stokes, MD, Marguerite B. McDonald, MD</i>	
18. LASEK Complications	183
<i>Jae Bum Lee, MD, PhD</i>	
19. Management of LASEK Complications	195
<i>Massimo Camellin, MD</i>	
20. Wavefront Analysis, Principles, and LASEK Application	205
<i>Ronald R. Krueger, MD, Patrick C. Yeh, MD, and Dimitri T. Azar, MD</i>	
21. Customized Ablation and LASEK	225
<i>Erin D. Stahl, MD and Daniel S. Durrie, MD</i>	
22. Comparison of Wavefront-Guided Photorefractive Keratectomy and LASEK Treatments for Myopia and Myopic Astigmatism	235
<i>Zoltán Z. Nagy, MD</i>	
23. Wound Healing After PRK, LASIK, and LASEK	241
<i>Takuji Kato, MD</i>	

24. Biochemical Basis of Epithelial Dehiscence and Reattachment After LASEK	253
<i>Eric E. Gabison, MD, Hailton B. Oliveira, MD, Jin-Hong Chang, PhD, and Dimitri T. Azar, MD</i>	
25. Refractive Surgical Wound Healing Mechanisms Revisited: A Glimpse at the Future of LASEK	263
<i>James V. Jester, PhD</i>	
26. Mitomycin C and Haze: Natural Progression	273
<i>Mujtaba A. Qazi, MD, Jay S. Pepose, MD, PhD, Irwin Y. Cua, MD, Saira A. Choudhri, MD, and M. Azim Mirza, MD</i>	
27. Mitomycin C and Surface Ablation	297
<i>Scott D. Barnes, MD and Dimitri T. Azar, MD</i>	
28. Use of Autologous Serum to Reduce Haze After LASEK	307
<i>Steven B. Yee, MD, Ning Lin, MD, OD, Alice Z. Chuang, PhD, and Richard W. Yee, MD</i>	
29. LASEK After Corneal and Intraocular Procedures	317
<i>Puwat Charukamnoetkanok, MD and Dimitri T. Azar, MD</i>	
30. LASEK After Penetrating Keratoplasty	323
<i>Steven B. Yee, MD, Ning Lin, MD, OD, Corey B. Westerfeld, MD, and Richard W. Yee, MD</i>	
Index	331