Difficult and Complicated Cases in Refractive Surgery

Jorge L. Alió Dimitri T. Azar Alessandro Abbouda Amr El Aswad Editors





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To my Father,

All your help and support has allowed me to become a doctor. Thank you from the bottom of my heart.

Alessandro

Foreword



Refractive corneal surgery, including Lasik, PRK/Lasek, corneal inlays, collagen cross-linking, intracorneal ring segments, thermal keratoplasty, incisional refractive surgery including radial and astigmatic keratotomy/limbal relaxing incisions, and phakic intraocular lenses, together represent the second most common surgical procedure performed by the ophthalmic surgeon worldwide. While cataract surgery dominates at approximately 20,000,000 procedures per year globally, refractive corneal surgery including those procedures used in combination with cataract surgery together accounts for over 5,000,000 surgical interventions annually. In the modern era of ophthalmology, every ophthalmic surgeon must consider the refractive outcomes generated by every procedure, as a patient's daily visual function and quality of life are significantly impacted by their residual refractive error following surgery. Like every invasive procedure, refractive corneal surgery and phakic intraocular lenses are associated with complications. The proper prevention and timely management of intraoperative and postoperative complications is the hallmark of the master ophthalmic surgeon.

In their new book, *Complicated Cases in Refractive Surgery*, two master surgeons, Jorge Alio, M.D., and Dimitri Azar, M.D., along with a carefully selected group of highly experienced and respected colleagues present us with an extraordinary compilation of 101 select cases of both common and rarer complications, including their presentation, management, and clinical outcomes. This style of teaching using real-life cases is extremely effective and popular with surgeons, as it provides a learning experience that is impactful and more easily

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remembered than the typical didactic chapter referencing the published literature.

This new book, a follow-on publication to the same two editors' popular *Management of Complications in Refractive Surgery*, published in 2009 and translated into multiple languages, is a must read for every ophthalmic surgeon who performs refractive surgery along with those who help manage or encounter these patients in daily practice. The case presentation format is engaging and an easy read. The cases presented are well selected, are edited for maximum educational value, and provide the reader with one clinically useful pearl after another. Drs. Alio and Azar, thank you again for providing us with such a powerful and pleasant learning experience that is certain to benefit surgeons and patients worldwide for years to come.

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Preface

This is a unique book in which a clinical cases affected by complications of refractive surgery are presented as a series of cases to illustrate how, in practical terms, such complications can be managed.

In 2007, we published our book *Complicated Cases in Refractive Surgery*, which was well received and which has been translated into many different languages including Chinese. In that book, we offered state of the art pathogenesis and knowledge of management of complications in refractive surgery from classical techniques to the most recent innovations. In this book, we illustrate the practical knowledge and details that are necessary to achieve successful outcomes in many of these complex cases.

This book has been created based on the didactic technique known as "problem resolution." Problem resolution is a modern, innovative pedagological method of teaching medicine. We should not forget, however, that 2400 years ago, on the island of Kos, Hippocrates and the Hippocratic doctors were applying the hands on method to teach their students. The practice of medicine was basically empirical, and it was not until later that the volume of medical science enabled formal theoretical teachingto be incorporated into the curriculum.

In this book, the reader will find a series of interesting cases that illustrate the most frequent and complicated cases in refractive surgery and how different authors have accomplished their solutions successfully. While mostly-cases with successful outcomes have been included we have tried to illustrate in 101 cases how potential nightmares can have happy endings. We have simplified the process of analyzing the cases and extracting what is really the practical message that each case offers.

Our hope is that the reader will learn how difficult cases can be approached and solved, using the latest technology and medical knowledge available. Reproduction is a way to demonstrate, and demonstration is the basis of medical science. The art of being a doctor is using the scientific background that the doctor has jointly with his/her practice and experience that guides the medical judgment toward the best option for the patient. We hope that you will find the chosen cases of interest and be intrigued by the medical challenge they represent. Finally, the successful outcome that has been accomplished by the talented and innovative coauthors of this book.

We want to thank our talented coauthors for providing cases with innovative techniques and successful outcomes. We also would like to thank our x Preface

associate editors for the many hours of work devoted to gathering together these cases, to simplify the process of editing, and to offer a unique format which can be easily comprehended and readily applied to your own patients. In editing this book, we have felt that we have been walking on the island of Kos and writing this book jointly with our Hippocratic colleagues.

Signed in Alicante and Chicago 2015

Alicante, Spain Chicago, IL, USA Jorge L. Alió, MD, PhD Dimitri T. Azar, MD, MBA

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