

# Basic Techniques of Ophthalmic Surgery

**Second Edition**

Jean R. Hausheer, MD  
Executive Editor



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# Foreword

*Basic Techniques of Ophthalmic Surgery* is the second volume of a pair of books intended to improve surgical training in ophthalmology residency programs. The first book, *Basic Principles of Ophthalmic Surgery*, was originally published in 2006 (second edition in 2011). Together, these volumes provide a solid overview of the wide range of principles and procedures that will be covered throughout the residency training program. We are pleased to present new editions of both books together in 2015.

The Accreditation Council for Graduate Medical Education (ACGME) noted in its 2008 program requirements: “The education of surgeons in the practice of general surgery encompasses both didactic instructions in the basic and clinical sciences of surgical diseases and conditions, as well as education in procedural skills and operative techniques. The education process must lead to the acquisition of an appropriate fund of knowledge and technical skills, the ability to integrate the acquired knowledge into the clinical situation, and the development of surgical judgment.”

For ophthalmology, surgery is a core and complex competency, and surgical training remains a process equally daunting for teacher and student alike. From the start, the authors’ objective for the *Basic Techniques* book has not been to supplant the role of individual mentor-to student surgical instruction, but to compile many of the key elements of the surgical process and environment into a valuable complement to the overall learning program. The result is a volume that should be a core, critical learning resource for every resident. This new edition also brings in 150+ video snippets, a major accomplishment that reflects the skill and dedication of some wonderful surgical educators.

As surgeons, we have a profound obligation to our patients. They honor us by entrusting us with their sight and sometimes their lives. This text acknowledges the complexity and scope of that obligation.

David W. Parke II, MD  
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# Preface

Ophthalmic surgical knowledge and procedures continue to evolve exponentially. This edition aims to reflect that progress, including new ophthalmic surgical interventions, updates to older procedures, new chapters on the diagnosis and management of challenging ocular conditions, and the significant addition of surgical videos.

Meticulous and thorough preoperative patient examination, planning, and communication remain fundamental to achieving excellent surgical outcomes. The ophthalmic surgeon is responsible for the management and coordination of the surgical team as well as the operative process and procedures. This surgeon plays the primary role in patient safety and outcomes.

This book is a supplement to the required training and experience that is essential for every ophthalmic surgeon to achieve safe and effective outcomes for patients. Surgical site marking, which is not covered in this book, must be consistently followed by the ophthalmic surgeon with accuracy and precision. Perioperative ophthalmic medications for each procedure are briefly discussed herein, and the physician should be mindful to continue to explore the specific and proper use of medicaments for each procedure—which is an exhaustive body of knowledge since perioperative pharmacology knowledge is continuously evolving along with the surgical procedures themselves.

A given surgical procedure may be performed expertly and safely using different variations globally. The contents of this book describe and show some of these alternative methods for consideration. It is important for today's ophthalmic surgeon to consider the fact that each patient's case will be unique. One can use the information in this book as a basis that will require skilled decision-making to address each patient's particular findings and condition accordingly, recognizing there is no single best method that can be described that will be safe and effective for each case. Many possible coexisting conditions dictate modifications to fundamental surgical procedures that the treating surgeon may have to deal with in practice. One must continuously learn and apply his or her knowledge and experience as ophthalmic interventions and procedures evolve. Accordingly, the ophthalmologic surgeon should utilize these suggested steps as guidelines and a basis to assist in the journey of each surgical case.

Inherent in optimization of surgeon life-long career planning, ergonomics should be closely monitored and followed on each case. I express the enduring hope that by following sound ergonomic practices, everyone's back, neck, and hands over the course of their careers will remain strong and steady.

The surgical case can become complex if proper patient positioning is initiated incorrectly, or the surgeon is not fully familiar and knowledgeable with the proper use and risks associated with each surgical device and instrument for a given procedure. Mastering such tasks takes time and experience and extends throughout one's career, particularly the ability to personally set up and take down ophthalmic surgical equipment. Surgical



simulation is an effective tool ophthalmic surgical training, and should include regular wet lab practice alongside an experienced surgeon.

Patient compliance in the perioperative period can remain problematic once their vision returns, or if they are not compliant with the postoperative medicaments that are prescribed. To achieve good outcomes, it is imperative to optimize compliance at all levels, and document all communications with patients.

Many of these topics are discussed further in the companion book, *Basic Principles of Ophthalmic Surgery*, third edition.

I would like to dedicate this book in honor of the late Richard Zorab, who spearheaded the development of the first edition of this book. This new edition would not have been possible to create without the expert contributions of chapter authors as well as subspecialty sectional editors. All put forth tremendous effort in updating this ophthalmological surgical textbook. It has been an honor, privilege, and humbling learning experience for me to work alongside each of you.

I much appreciate the efforts of James P. Dunn, MD, and Paul D. Langer, MD, who served as executive editors of the first edition and whose updated chapters appear here. I thank Kim Torgerson and Daniel Mummert of the Academy staff for their time, talent, and expertise in preparing this work for publication.

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