Howard M. Ross · Sang W. Lee Matthew G. Mutch · David E. Rivadeneira Scott R. Steele *Editors*

Minimally Invasive Approaches to Colon and Rectal Disease

Technique and Best Practices

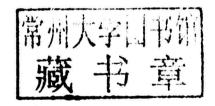




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Foreword

This is an exciting and urgently needed text that takes a comprehensive, critical approach to the latest developments in minimally invasive surgery for colon and rectal diseases, and does so in a highly practical fashion. The book highlights the important ideas of many of the most experienced and well-respected leaders in the field from the USA and adds perspective from internationally respected surgeons from Japan and Europe. Drs. Ross, Lee, Mutch, Rivadeneira, and Steele form an all-star team of editors and contributors. They have clearly been leaders in colon and rectal surgery who continue to search for better outcomes for their patients and patients everywhere.

The book provides the reader with a format that will be of practical use on a day-by-day or case-by-case basis, since each chapter stands alone independently, and provides important technical details and highly useful illustrations and videos on procedures, as well as "pearls and pitfalls" at the conclusion of each chapter.

Important and controversial new techniques such as use of robotics and single-incision laparoscopic surgery (SILS) are addressed head on by experts in these techniques, and "standard" laparoscopic methods are also presented in various forms by surgeons who have performed many hundreds of these procedures in their practice.

I have had the pleasure of watching many of the authors and editors of this important book hone their skills and judgment over many years. We are fortunate to experience their collective wisdom on tackling some of the most difficult intestinal surgical problems in a format that is easy to use and enjoyable.

This book is certain to find an important place on the shelves of surgeons around the world who wish to keep current with the rapidly evolving field of minimally invasive surgery for colon and rectal diseases. The editors should prepare themselves for future editions, as we readers will be looking for them to continue to define the field!!

New York, NY, USA

Jeffrey Milsom, MD

Preface

"We should strive to welcome change and challenges, because they are what help us grow."

H.G. Wells

Change is most often simply a matter of time, and in surgery that is no different. Large incisions have frequently been replaced by small, and hands by graspers. The surgeon may now find themselves away from the operative table, as open surgery is steadily transitioning to laparoscopic and robotic techniques. Even traditional approaches to anorectal lesions have witnessed a new paradigm. That is not to say that all changes are needed, or even welcome. Yet, the changes witnessed in the evolution of minimally invasive colorectal surgery have played a large role in both minimizing morbidity and maximizing outcomes. Change also brings certain challenges, and specifically, colorectal surgery presents its own unique set of trials. It is within this context that *Technique and Best Practices* examines the considerations, drawbacks, and advancements minimally invasive techniques have provided in the evaluation, management, and outcomes across a broad range of colorectal disease and procedures.

For some readers of this book, a minimally invasive approach to colorectal disease may add a new dimension to the management of these patients. For others, it is the opportunity to learn helpful tips, specifics about a certain procedure, or to fine-tune what has already become a routine part of their practice. Even if you have successfully overcome many of the technical challenges of minimally invasive surgery, the preoperative evaluation, perioperative decision-making, and management of postoperative complications can be demanding and consuming. Wherever you may be on this spectrum, *Technique and Best Practices* has something to offer. The underlying focus throughout the text is on providing pragmatic advice and reproducible techniques that can be readily implemented by surgeons of varying experience to successfully treat complex colorectal problems through minimally invasive methods.

Our author experts have years of experience with minimally invasive approaches to colorectal disease, and in some cases, have been the pioneers in this field. Despite extensive training and a wealth of clinical experience, many surgeons do not have the resources or volume to garner the skills and experience to feel completely comfortable with, or in some cases, master these techniques. In this text, our authors have cogently and equitably provided a unique, practical guide that covers the evaluation, step-by-step technical approach, and detailed management techniques. Within each chapter, they focus on the details to help overcome the issues that make these procedures and disease processes challenging. Yet, this is more than a "how to" manual or an algorithm-based guide.

Our other aim with *Technique and Best Practices* was to understand the intricate thought process behind each author's proposed technique and describe their personal insight as to why they approach a particular colorectal disease process or minimally invasive procedure a certain way. This abundant practical advice allows a concise depiction of a methodical, understandable approach to both straightforward and complex cases. Additionally, by providing separate chapters on the procedure and the disease process, we systematically provide both an overview as well as detailed portrayal of how a minimally invasive approach aids in the management of these patients.

Since its conception, it has been our privilege and pleasure to work with this expert cohort of authors, as their individual contributions have come together to make a combined effort where the sum is definitely greater than the parts. We would like to personally thank each one of them for taking time away from their busy practices and families to share their knowledge, skill, and valuable insights regarding minimally invasive colorectal surgery. We are grateful for their candor in discussing both the positive aspects as well inherent limitations. It is our wish that *Technique and Best Practices* serves as a valuable resource for surgeons of all ages and expertise, and hope you will find this as intriguing and helpful as we have.

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The completion of this textbook has been a dream of mine, but its production is truly the work of so many. I would like to thank my wife, who has always helped me to become everything I always wanted, my children, who make all work worthwhile, and my parents, uncle, in laws and teachers who were so generous with their love, time and support. Further, I would like to thank my many colleagues, friends and mentors in the American Society of Colon and Rectal Surgery who strive so hard to improve the care of those with colon and rectal disease.

Howard M. Ross, MD

I would like to acknowledge and thank many colleagues and friends for volunteering their precious time and expertise. I would like to thank our Developmental Editor at Springer, Elektra McDermott, for encouraging us throughout the writing of the textbook. I also would like to thank my mentors, Jeff Milsom and Larry Whelan for guiding and supporting me throughout my career. To my coeditors, Howard, David, Scott, and Matt, thank you for your hard work and friendship.

Finally, and most importantly, I would like to thank my wife, Crystal, for her support, encouragement and unwavering love; and my sons, Eric and Ryan, for making me a better person and making everything worthwhile.

Sang W. Lee, MD

To my parents for the giving me everything I needed to realize my goals. To my wife, Jennifer, for her unconditional love and support and to my children, Megan and Adam, for showing me the most important thing in life is family. To my coeditors for their dedication and tireless effort that has made my participation rewarding. To all of the authors for their contributions and mentorship to constantly improve the quality of our specialty.

Matthew Mutch, MD

To my parents, Eduardo and Manuela for teaching me to dream. To my wife, Anabela, for teaching me to love. And to my children, Sophia and Gabriella, for teaching me to laugh. To my fellow coeditors H.R., M.M., S.L., S.S., and surgical mentors throughout my career "If I have seen further it is by standing on the shoulders of giants"—Isaac Newton.

David E. Rivadeneira, MD

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Part I Preoperative